

598

CGTTATCAAA CTCATTACCA ATTGAAACAA AAAACTGTGG TTAGAGCCTT TCGGAAATCG	7560
TCAAGCGATT GGAGGAAATG AACTAATCCA CAGTGGCTTA TTCCAAGTAT ACCACTTGGG	7620
CTTTGGCAGT AGCTAACTGC GCTAAATATA ATATAAGGAG AAATAGATGG ATTTATGGTT	7680
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TGGAAAAAGT GAATGGCAGG ATATCGAAGT CTTGGATACG CCAGCTTTTG GAAAAATACT	7800
GATTTTAAAT GGCCATGTCT TGTTCCTCAGA TGCGGATGAT TTCGTCTACA ATGAAATGAC	7860
CGTTTACGTT CCCATGGCTG TCCACCCAAA TCCAAAGAAA GTATTGGTTA TTGGGGGTGG	7920
TGACGGCGGT GTTGCCCAAG TATTAACCCT CTATCCTGAA CTGGAGCAAA TTGATATTGT	7980
GGAACCGGAT GAGATGTTGG TCGAGGTCTG TCGTGAGTAT TTCCAGACT TTGCTGCAGG	8040
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CGAAGATGAT TACGATATTA TCATCAACGA TGCGCAGAT CCATTGGCC ATACGGAAGG	8160
ACTCTTTACC AAGGAATTC' AC'GCAATAG TTATCGAGCT CTGAAGGAAG ACGGCATCAT	8220
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AAAATGAGTC GTTTACTAGT TATTGGTTGT GGGGGCGTTG CCCAAGTTGC TATTTCAAAG	8580
ATTTGTCAAG ATAGCGAAAC ATTTACAGAG ATTATGATTG CTAGCCGTAC CAAGTCAAAA	8640
TGCGATGACT TGAAAGCGAA GCTAGAAGGC AAAACAAGTA CTAATATGA AACTGCAGCA	8700
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GTTTGAATG TAGCTCTGCC TTA'CAAGAT TTAACCATTA TGGATGCTTG TTTGGCAACA	8820
GGTGTCACT ATATCGATAC AGCCAACTAC GAAGCAGAAG ACACAGAAGA CCCTGAGTGG	8880
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GATGGGAAAT GGGTCGAAGT CGAAGCTATG TCTATCAAGC GTGAGTATGA TTTCCCTCAA	9240
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CTCAATATGG GTGGTGGTCA TCATATTACA AGAGAAGGTT ACGATGTGGA TTTGCTGATT	10440
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CCCTATCGTC CACCTTTGAG AAATGGCTTT GAGTCACAGG AAAAAGCCCA TACCTACAGA	10680
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GTCCAAATCG GAGACAGACT TTATTTTCAA GACATGGCCA TTTATTCTTT TGTCAAAAAT	10800
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ACGCAGCAGC GAATATTGTT CCAGTCATCG CAGCCAATCG TTATGGTTTA GAGGAGGTTA	12660
CTCCTAGTGA GGAAAATGGC GGACAGAGCT CCAGTCTTGA CTTCTACGGT TCCTCCTTTA	12720
TGACGGATGA AACAGGAGCT ATTCTAGAAC GAGCTGAAAG ACAAGAAGAA GCTGTTCTGT	12780
TAGCTACTTA TGACCTAGAC AAGGGAGCAA GTGAACGCCT AACTGGGGC TTGTTTCGAG	12840

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TTCTGCTAGA CTAACCTCTT ATTAGTAAGT ATAAGATACT ATGGCATCTA GTAAATCGAT	12960
TTTTATGATT CGCTATTCTT GTCTATTGAT TAGTCCGTAT TTTAAATAT TAGCAAAAAA	13020
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GCACGCGCAA CGCCGTCTTC TTCGTTGCTT GAGGTAACGG CATCCGCAAG AGATTTGATA	13140
TAATCGCTGG CATTTCCCAT TGCAATCCCA AGCCCTGCAA ACTGGAGCAT TTCGATATCG	13200
TTATTAGCAT CGCCCATGGC CATAATCTCT GAGGAATCAA TCTTCAAAAT CTCAGCTAGT	13260
CGTGAAAGAG CAGTAGCCTT TGTCGTTCCA AGCGGCATTG CTTCAATAAT GACAGGCTGC	13320
GAACGAACTC CACTGAATCG TTGGCAAAGC TCTTCAGCAA AACGCTGCTC AAAATCGTCT	13380
GTTTGTTCCTT TTGTTCCCTAA ACACATACCT TGGAACATCC GGAACCTTTC ACTAGTCGCT	13440
TCTTCAAGAG AAATTTCACT CAGGTCTGAA AATACTAGTT TAGCATCATT TTCAATAACT	13500
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TCGTCTCGGA GGTCAGCTC CAGTTTTTTG TAGTAGGGGA GGACACCGAA AAGGGGCGA	13740
CCCGTACAGA GAACCACTT GACACCTTTT TCAATGGCTT TGTGAATAGC AGTAATGTGT	13800
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TACAAATCAA CTTGGTTTTG GAGGCTTTTC AATTATCTCG CAAAGCCCTA TCTACCAGCA	14520
AGTCGTGAAT TTTTTCAGAT TCTGCTTTTG ATGGAGAGCG GAGTTCTTTT CTTAGCGGTC	14580

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ATCTATCTAC TGGTTTTTGC AGGAAAGAAA ATTTTTCATT TCAAGTGGCA GCTGAGGTAC	14640
TTCATCTACC TTTTACTGGG CTACATCATT TCATATATGT CTGACTTCCT CTTTTCGTAT	14700
TTTATATCCC TGTCTTCAAA TCAGATTTCCT TTGAATGAAA CGGTAGAAAT GATGGGGAGA	14760
CAGGAGTTCC CTTATGTCTT GCTCATCGTT TGCTTCATCG CCCCTATTGC TGAGGAATTG	14820
ATTTATCGAG GtGTGCTTAT GACAACCTGT TGCAAAAAC CACCTTGGA CG	14872

(2) INFORMATION FOR SEQ ID NO: 73:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 10223 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 73:

CGTGCTATCG GTCTCAAAAC CAATCTGGTC GCTATGGTCA AATCCAGTTG GAAAATCCAT	50
TCTTCTTGA GCCATCTGCT GGATTGCCAT CATCCTCACC ACTCTTGGTA TGCAGACCTT	120
TATCGGCATT TTCTAATACT CTTCGAAAAT CTCTTCAAAC CACGTCAACG TCGCCTTGCC	180
GTAGGTATAT GTTACTGACT TCCTCAGTTC TATCTGCAAC CTCAAAACGG TGTTCGAGCT	240
GACTTCGTCA GTTCTATCTG CAACCTCAAA ACGGTGTTTT GAGCTGACTT CGTCAGTCGT	300
ATCTACAACC TCAAAACAGT GTTTTTCGCT GACTTCGTCA GTTCTATCTG CAACCTCAAA	360
ACAGTGTTCG GAGCAGCCCG TGGCTAGTTT CCTAGTTTGC TCTTTGATTT TCATTGAGTA	420
TAACACAAAA GGTAGCCCAT CAGCTACCTT TTTCTTATGC TTCCTCAATC AAGCGAGTAT	480
GTCTCTCTT GATACAGCGA TTCATCAGCA TATCATCACA TCCACCATCA CGCAAAATCT	540
CTTTCGCTTC TAAACTTTCA AGTCCTAGCT GTGCCCAAAA AATCTTGGCA TCAGCTTTGA	600
GAAAATCAGC CGCCACATCG GGCAGAAATT CACTGCGACG ATAAACATTG ACAATATCTA	660
CAGGAAAAGG AATTTCAGCG AGGCTAGCAT AAGCCTTTTC ACCCAAGATT TCGCCACCTG	720
CCGCCTTGGG ATTGACTGGG ATGATTTTAT AGCCCCGAGC CTGCATTTC TTTGTTACTC	780
GATTGCTGGT TGTTCCTTCA CGGTCAGACA AACCACACAG AGCAAGGGTT TTAATCGTTG	840
CGAGATACTG ACGAATCAGC CCATCACTTG GATTGATAAA TTCTTGACTC ATAGAAATCC	900
TCCTTTTTC TCACTATAGC ACATTTTGAA AAGGTTTGCA GAATTATACT ACAAAAAAGG	960
AGGACTAGCC CCCTTTTAT TTAGCCTCGT ACCAGGTTGC CCCTTCATTC TCATCTGCGA	1020
TAAGAGGAAC ACTGAGTTGA ATGGCTTCTT CCATGGTTTG TTTACCAAT TTTTTCATCT	1080
CTACCAATTC AGATTTAGGC ACTTCAAGGA CGATTTTCATC GTGCATTGT AACAGCATCT	1140

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TAGTCTGATA ACCACCTGCA ACCAAGGCTT TATCCAGCTG AATCATGGCA ATCTTGAGAA	1200
TATCTGCTGC CGAACCCTGG ATAGGTGAGT TGATAGCAGT TCGCTCCGCA AAACCACGAA	1260
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CATAGCCCTT ATCACGCGCC TCCCGCACCA CTTCATCCAT GTAGTTTSTA ATACCTGGAA	1380
AACGTTCAAA GTAGGTATCA ATGTAGGCTT TGGCTTCCTT ACGACTAATT CCCAAATTAT	1440
TAGACAAGCC AAAGTCTGAA ATCCCATAAA CCACTCCAAA GTTAAC TGCC TTGGCATTGC	1500
GACGGTCGTT TGCAGTCACA TCATCAGGAC GCTCAATGCC AAAGACCCGC ATGGCTGTCTG	1560
AAGTATGGAT ATCTGCCCCC TCTTGAAGG CCTTAATCAA GTGCTCATCC TTAGAAATAT	1620
GCGCCAAAAC GCGCAATTCA ATCTGTGAAT AGTCAGAGCT GAGTAGCACA CTATCCTCCC	1680
ACTCTGGCAC AAAAGCCTTC CGAATCAAGC GCCCTGTTC CAATCGGGCA GGAATATTTT	1740
GCAAGTTTGG ATCCACACTA GACAAACGCC CGGTCTGGGT CAAATCCTGC ACATAGCGAG	1800
TATGAATCTT TCCATCAGCC AAAATCCAGT CCTGCAAGCC AATTACATAA GTAGATTGAA	1860
TCTTAGCAAT TTGACGGTAA TCCAGGATTT TCTTAACAAT CGGAGCAATA GGAGCGAGAC	1920
GCTCTAAAAC ATCCACTGCT GTCGAATAAC CTGTCTTGGT TTTCTTAGTG TATTCTAGAG	1980
GAAGTCCCAA TTTCTCAAAG AGAAGCACGC CCAACTGCTT AGGCGAGTTG ACATTAAACT	2040
CCTCACCAGC CAGCTCGTAA ATCTCTTGAG TCAGTTTTC AATGACAAGC TCATTTTCAG	2100
CCTGCATCTC AAGCAAGGTC TCTTTCTTGA CCATAATCCC AGCAATTTC ATCTGGCAA	2160
GGACAAAAGC CAGAGGTTGC TCCATATCAT AAAGAAGCTC TAATTGCCCA TTTTCGCTGA	2220
GTTTTC AAG TAAAATAGGC TCTGTTTCTA CCAAACAGC AAGTTTACAA GCTAAGTGTT	2280
CCAAGAATTT CTCACGTTCA GGAATGGCCT TTTTAACACC CTIACCGTAG AAAGTTTCAT	2340
CATCAACCAA GTAAGTCTGA CCATAAAGAC TAGCGATGGT CGCAATTTC TTGTCCTCCA	2400
CAGTCGAAAG GAGGTATTTA GCCAAACGGA TGTCAAAGC AGGCGCCTGC AAATCCACAC	2460
CAAAACGTTG CAAAAGAAT TTAACCTTCT TAAAGTCATA AACTCTCAGA GATGTTTTTT	2520
CTAAGAAATC CTGAAAATC GGGTCTTGCA ACAGCTCAAG CTGTCTGTG GCATAGAGCT	2580
TATCCCCACA AGACCAGACA AATCCAACCA AATTATCCGT ATGGTAATTC TCACCAAAAA	2640
GCTCAAAGTG GAAGATAGAC TCTTCACTCA GCATATCTTG ACTGATTTGG TCAACAATAG	2700
TAAAATCCAA ACTCTCAGAC ACATCAGCTG ACGACACATT TAAAGCCTGC TTTAGCTGTT	2760
TGAAGCCCAT CTCATCGTAG AATTTCCCAA GATTTTCAAC ATCTGGACCA CTATAGACCA	2820
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CAATATTTTC ATAAATCCCC	TCAAGCGAAC CATGCTCCAG	CAAGAGCTTA ATACCCGTCT	3000
TTTCACCGAC TTTGGTCACC	CCAGGGATAT TATCCGACTT	ATCACCCATG AGCGCCTTGA	3060
GATCGATAAA CTGAGCTGGT	GTGAGGCCCA TTTCCTTCAT	GAGGTAATCT GGCCTAAAGG	3120
CCTCAAATC AGCCACACCT	TTCTTGGAAT TTTCAACCAC	CGTATGCTCA TCCGTCAGCT	3180
GAATCAAATC CTTGTCCCA	CTGACAATAG TAATATCAA	ACCATCCTGC TCTGCTAGCT	3240
TATCCAGCGT CCAATGATG	TCATCCGCCT CATACTGAGC	CAGATCATAG TGACGAATCC	3300
CCATATGATC CAGCAACTCA	CGAATGAAAG GAAATTGCTC	ACGAAACTCA TCAGGAGCT	3360
TGGCCCGACC ACCCTTATAG	TCCGCATACA TCTCTGTCCG	GAAGGTCGTC TTTCCCGCAT	3420
CAAAAGCCAC CAAAATATGA	CTCGGCTCAA CCCGCTCCA	TAAATGACTC AACATCAACT	3480
GAAAACCATA AATCGCATTG	GTATGCAAAC CAGCCACATT	CTTAAAACGG TCCAACCTGCT	3540
GATACAGCGC AAAAAACGCC	CGAAAAGCTA CAGAAGACCC	ATCAATCAAT AATAATTTT	3600
TCTTATCCAT ACACCCATTA	TAAAGGAAAG AATCAAAAAA	TACCATTGGG AAGAGCTAGA	3660
GCAAGTATTT TTCAAATTT	TTCCGAATAA ATAGATAGAG	CCAGAGAATT TAGTAAACCT	3720
AGATTTAAAA ATGTGCTATA	ATATAGTATA TTGAATCTAT	AATAGTACAC CTTGACTGCT	3780
AAAATATTTT TATAAATTAA	TTTGACTTTC CTGATAGAGT	TATTCACATC TTATTTCAAC	3840
TCACATATAG AGGAGGAATA	GGAGGATTCT CAGACATCCG	GGCATCAGCC CAACTAATGA	3900
TTTGATTGCT AAGAAAATAT	TCAGCAATCC AGAAATCACT	TGTCAATTTA TTCGCGATAT	3960
GCTGGACTTG CCAGCAAAAA	ATGTGACCAT TTTGGAGGGA	AGCGATATTC ACGTATTACT	4020
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TAGTAATTAT TTCTCAGATG	ACCTGGCTTT TCATAGCTTT	AGTATGCGCG AAGACACAAC	4320
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CTTGGAATTA AAAAATACAG	AGAAACCAGC AAAGACAAGG	TTGCAAGCC ATGGTTGGAG	4440
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CGAGAAGAAC AAGTCTTGT	AGCACAGGAC TATGCCTTGG	AAACTGCTAG GGCTGAAGGC	4620
CTTGAACAAG GACTAGAGCG	TGGGAAAGTT GAAGGAAGGG	CAGAAAGGAA ACTTTTTGCC	4680

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ATGTCAGTAT CTGAATTGGA GGCAGTGTG TAAAATGGCT CCATAATATC CATAGTGGGT	4800
AAATCCCCTA TGGATATTAT GGAGCCTATT TTGTGTAGAA AAAAAGTCCC ATATGACCTA	4860
TAATGAAAAG CGACAAAACA ACTCATTAGA AAGAATCATA TGAACAATT ACATTTTATC	4920
ACAAAATTAC TAGACATTAA AGACCCTAAT GTCCAGATT TAAACATCAT CAATAAGGAT	4980
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GGTATGCCCTA CAAGAATTCT CCTTAGAAAG CGTCGATTCA AGTGCTATCA CTGTTCAAAA	5160
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ACAGTTTTAA ATCTAGCTTT ACTAGATTCA CCGCTACTAT CTATTTATTC GGAAAAAGA	5280
CGAAAAACC TGAGAATCAT CTCAGGCTTG GTCATTAAAT TTTTTTCTCA ATATCGAAAA	5340
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TTGAAATCTG CTCAATCTTA TCAATCAAAC GCTCTTCTGG CAGATAGATG GTATCCAAAA	5460
CAACCAATTT CTTAATAGCT GATTTTGGG TATTGTCCGT AGCAGGACCA GAAAGAACTG	5520
GGTGCCTACA GCTTGCATAG ACTTCAACAG CACCAGCTTC CGCAAGAGCA TCTGCCGCAT	5580
GACAAATCGT TCCAGCGGTA TCAATCATAT CATCAATCAA GATACAAGTC TTGCCTTCAA	5640
CCTTACCGAT GATATTCATA ACTTCACTAG TATTCATCTT ATCAACGCTA CGACGTTTAT	5700
CAATAATAGC GATAGATGTT TTCAAAAATT CTGCCAACTT ACGAGCACGA GTCACCCCTC	5760
CATGGTCCGG GCTGACAACC ACATAGTCAG AACCAACCAT ACCACGACGC TCAAAATAAT	5820
CTGCAATCAG AGGAGCACCC ATCAAATGAT CCACAGGAAT ATCAAAGAA CTCTGAATTT	5880
GCGCAGCATG CAAGTCGATG GTCAATAAAC GATCCACTCC AGCTACTTCA AGCATATTTG	5940
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CGTGTTTCCC ACGGATTGAT TCTTCAATGT TGACCTGAAT CTCTCCATCT GAAAATTGGC	6180
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TTTTTCAATC AAAAAATAAA GAAGGGCACC ATATTGTAC CCTTGCATCA TTCTTTTGAA	6420

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AAATATTCTA GGCATCAAC TCATTGTGTT TCTCAACAAA GCAATAAGCA TGATAAAAAC	6480
CATAGAGAGC AATAGCCGTA ACCACTGGAA TCGCTAAAGG CAACTCTGTT TCCAACCTCA	6540
CAAAGGAGA GTTAAACAAG AAGTGAGTTC CCAAGGCTAA ACCTAGAAAA ATAAGGCCCT	6600
GTTCCTTGCC AACCTTCTGT CTTTATAGG CTCGTAAAG CAAGTAAACA CTTACTACAG	6660
CTAGACCTGA AAAAGTCCAG TGAGAGGCAA TTCCTGAGAT GATACGCTCT AAAATTCGCG	6720
AAATAGTAAA GTCAAAGCCC TCTGGCAAAT CCGTACGAAT ATAACCAATA TCCTTAATCA	6780
TTTGGAATCC CAAACCGGAA GCAATTCCAA GTAAAAACAA AGATTTTAAT TTTCGCACAG	6840
GAATCAAAGC CAAAACAAAA ACAAGTGACA ATAATTTCAA GGGTTCTTCT ACCAAAGGAG	6900
CCGCAATAGC ACTTTCAAAG GCATTTAAAA ATGGACTATC TGGGAAAAGA ACCCCAGTA	6960
AATCATGGAT ATAAGTATTA GCAAACTAG ACAACCAGCC TGAAAGGAAC ATCCCTCCCA	7020
ATAAAGACAG AATCAAAACC TTCTTTGGCA ATTCCTCATTT TTCCCAATAC GGAAGAGAAA	7080
ATAAAGAGCC GGAATCATGT AAAAGAGAGC TAGAAGATA GAAACTCCCA TTAGTCCATA	7140
TTCCGCACCT GACCTCGAAC CGTCCGTATA GTAGATGGTT TCATACTGTA AACCAATACA	7200
TAGCAATAAA ATAAAAATAA ATAAAATATT GCTTTTCTTC ATACACTTTC TTCTTAAATG	7260
AAGTATTTAT AATTCTACGA CTGTCATACT TCCTGTATCA ACATTGTAAA TGGCACCAGA	7320
GATAATGACA TCGTCTGGTA TTAGGGGAGA CTCGATAAGC AGTTGCATAT CCTCGCGTAC	7380
ACTCTCTTCT ATATCTTGGA AGGGCAAGAA GTCCTGGTCT GACACATCGA CACCCAATTC	7440
TTCTTTCAA TACTCCTGAA AAGGTTCAAT TTCAAAGGTC TGAGCACCAC AGTCTGTATG	7500
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CATATCCTCA GTCACGCGAC CACCTGCATT CCGCAAAATA TGAGCATCCC CAAGTGCCAA	7620
ACCTAGAGCT TGCGCAACGT GCAAACGTGA GTCCATACAG GTCACAATGG CTACTCTGGT	7680
TTTAGGTTTA AGTGGCAGAT TTAACGCCCC ATGTAGGGCA ACATAAGCCT GATTGGCTTG	7740
CATAAACTGT TCAAAATACG ACACGATTC CTCCTTGAAA ATTTGATAGT CAAATATTTC	7800
TCCTATCTTA TCATTTTAA GAGAATTGT CACGGATTAT GCAAAGACCT TTTTCAAGAC	7860
TTCTGAATC GTTGTACGC CAATGACCTG AATTTCCTTA GGCAGAGTGA TTCCTGTCAA	7920
GGAATTCCTTA GGTACATAAA TCTTAGTAAA GCCCAGTTTA GCAGCTTCGT TGATGCGTTG	7980
CTCAATACGA TTCACGCGCC GAATCTCTCC TGTCAGCCC AGTTCTCCGA CAAAACATTC	8040
CTGAGGATTA GTTGCTTGT CTTTGTAGCT CGAAGCAATA GCAACTGCAA CAGCCAAGTC	8100
AATCGCAGGT TCATCCAATT TAACACCACC AGCAGATTG AGATAGGCAT CCTGATTTTG	8160
CAAGAGAAGC CCTGCCGTT TTTCCAAAAC AGCCATAATC AAGCTAGCAC GGTAAAAATC	8220

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AAGTCCTGTC GTAGTACGCT TGGCATTTC	AAACATGGTC GGTGTTACCA AAGCCTGAAC	8280
CTCCGCCAAA ATCGGACGCG TCCCTTCCAT	GGTTACAACG ATGGAGGAAC CAGTCGCCCC	8340
ATCCAAACGC TCTTCTAGGA AAACCTGACT	CGGATTGAGT ACCTCAACCA AGCCGCCCGA	8400
CTGCATCTCA AAAATCCCAA TCTCATTAGT	GGAACCAAAA CGATTTTGA CCGCTCTCAA	8460
AATACGAAAG GTGTGGTGAC GCTCCCCTTC	AAAGTAAAGC ACCGTATCCA CCATATGCTC	8520
CAACATACGA GGCCAGCCA AGGTTCCCTTC	TTTGGTCACA TGACCTACGA TAAAGATGGC	8580
AATGTTATTG GTCCTGGCCA ACTGCATGAG	TTCAGCGGTC ACTTCACGCA CCTGAGAAAC	8640
AGACCCCTGC ACCCCTGAAA TCTCAGGAGA	CATGATGGTC TGGATGGAAT CAATAATGAG	8700
AAAGTCTGGC TGGATACGCT CCACTTCTGC	ACGAACACTC TGCATATTGG TCTCTGCATA	8760
GAGATAAAAC TCACTATCAA TATCACCTAA	GCGCTCTGCA CGTAGTTTAA TCTGCTGGGC	8820
AGACTCCTCC CCACTGACAT AGAGAACTGT	CCCCACTTGG GACAACTGGG TTGAGACTTG	8880
TAGGAGAAGA GTTGATTTC CAATCCCAGG	ATCCCCACCG ATAAGGACGA GACTTCCTGG	8940
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ATTGATGGAA GTCACCTCAG CTAGTTTCAT	GGGCTTGGTT TTCTCACCTG TCAAGGACAC	9060
ACGCGCATTC TTAACCTCGG CAACCTCAAC	CTCTTCCACA AAAGAAGACC AAGACCCACA	9120
GTGGGGCAA CGTCCCAGAT ATTTAGGGGA	ATTATACCCA CAATTTTGAC ATACAAATGT	9180
CGCTTTTTTC TTTGCGATGA CAAACCTCTT	TCTATATCTC TAACTCACAC TCAATCACTT	9240
GGCAAAAATC AATCTTCTCA TTTGGCACAA	ACTGGCGCAT GAGCATTCGA TGAGCAACAA	9300
CTACCACAGT CTGATGTTCT CGATACTTAG	ACATACATTC TAGAAACCGA GACTTCATTT	9360
CCGTAGCTGT CTCATATTGA ATAGGACTAT	TAGGAAGCAA CTCCCCCTTG TTTTCTAAAA	9420
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ATAAAGGCTC TACTCTTAAA GGAAGACCCG	TAGCACAGAC CACATACGAA GCCGTTTCTA	9540
AAGCTCTTGT GACTGCAGAA GATACGATTA	TTTCAGCTGA CGAGAGTAAA GGATTTTGC	9600
TCAATTTCTG GACTTGCTGC CGTCCCATCT	CAGACAAGGG TGCCAAATCT ATCCCAAATC	9660
CTATATAAGA ACGCTCCTCT AACTCACGGT	AATCTGGCTC CCCATGACGT ACAAAGATAA	9720
TCTTCATTCT AGTGCCCTGT CGATCCAAAT	CCACCAGTTC GAACGCCATC AGCTGCATCT	9780
CCATCTGCAA TTAAGAAAGT AGCAAAAACA	GCCTGGACAA TACGCTCCCC AACTTCAAGA	9840
ACAACCTCTT GGTCTGTGAT ATTCTTCATC	TGCGCAAAAA TATGCCCTTC ATTTCCAGGA	9900
TTTCCATAAT AATCCCCATC AATGACTCCA	ACTGAGTTAA TTAAAACCAA GCCCTTCTTA	9960

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CGAGGATTTG AAGAACGATC ATAGAGGTAG AGAACCTCAG TCGGCTGCAT ATAAGCCTTA	10020
ACCCCTGTCG GAACCAAGAC AATCTCTCCT GGCGCAACAA CTGTACGCAC AGCAACCTTT	10080
AAGTCGTAAC CAGTCGCATG CGCTGTCTCA CGCTTGGGCA ATAAATTTC ATCTGTAAAA	10140
CTCGAAACCA ATTCAAAACC ACGAATTTTC ATAATTTTCT CTTTCTTATT ATCATTTATT	10200
CTAGATTATT CTATACTTAT TTA	10223

(2) INFORMATION FOR SEQ ID NO: 74:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 16535 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 74:

TGGTTCTGTC CTTATCGGCG CCTGTCTTG CTGCCATGG CTACACCAAC TATCTCATCC	60
GACGAAAGTA CACCAACCAC TAACGAACCC AACAAACAGAA ATACAACCAC CCTTGCCCAA	120
CCTCTTACTG ATACAGCAGC TGGCTCTGGT AAGAACGAAA GTGATATTTT TTCACCTGGA	180
AATGCAAAACG CTTCCCTAGA GAAAACAGAA GAAAACCTG CTGCAAGCCC AGCCGATCCA	240
GCACCACAAA CTGGACAAGA TCGTTCAAGT GAGCCAACCTA CTTCTACTAG TCCAGTAACA	300
ACTGAAACTA AGGCAGAAGA GCCCATCGAA GATAACTACT TCCGTATCCA TGTCAAAAAA	360
CTTCCTGAAG AAAACAAGGA TGCTCAAGGA CTATGGACTT GGGACGATGT TGAAAAACCA	420
TCTGAAAACT GGCCAAACGG AGCTTTGTCC TTCAAGGATG CCAAGAAAGA TGAATACGGC	480
TATTACCTAG ATGTCAAATT AAAGGGAGAA CAAGCCAAGA AAATTAGCTT CCTCATCAAC	540
AATACAGCTG GAAAAAATCT AACCGGCGAT AAATCTGTAG AAAAAGTAGT TCCAAAAATG	600
AACGAAGCTT GGTAGACCA AGATTACAAG GTTTTCTCTT ACGAGCCACA GCCTGCAGGA	660
ACTGTTGCGG TCAACTACTA CCGCACAGAT GGCAACTATG ACAAGAAATC TCTCTGGTAC	720
TGGGGAGATG TGAAAAATCC AAGTAGCGCT CAATGGCCTG ACGGAACAGA CTTTACGGCT	780
ACAGGCAAAT ATGGCCGCTA TATCGACATT CCTCTTAATG AAGCCGCAAG AGAATTGGA	840
TTTTTATTAC TAGATGAGAG CAAACAAGGA GACGACGTGA AAATCCGTAA AGAAAAATTAT	900
AAGTTCACAG ATTTGAAAAA TCATAGCCAA ATTTTCCTAA AAGACGATGA TGAATCGATT	960
TACACAAATC CATACTATGT CCATGATATC CGTATGACAG GAGCCCAACA CGTAGGCACT	1020
TCTAGCATTG AAAGTAGCTT TTCAACACTT GTCGGTGCTA AAAAAGAAGA TATCCTCAAA	1080
CACTCCAACA TCACTAATCA CCTAGGAAAC AAGGTAACCTA TTACCGATGT TGCAATCGAT	1140

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GAAGCTGGTA AGAAAGTGAC CTACAGCGGA GATTTCCTCTG ACACAAAACA TCCTTATACT	1200
GTTAGCTACA ATTCCGACCA ATTCACTACC AAAACAAGCT GGCGCCTGAA AGATGAGACA	1260
TACAGCTATG ATGGCAAACCT GGGAGCTGAC CTAAAAGAAG AAGGAAAACA AGTTGATTTG	1320
ACCCCTTTGGT CACCAAGTGC TGATAAGGTT TCTGTTGTTG TCTACGACAA GAATGACCCCT	1380
GACAAAGTAG TTGGAACGTG CGCTCTTGAA AAAGGGGAAA GAGGAACTTG GAAACAAACT	1440
CTAGACAGCA CAAACAAACT CGGAATCACA GATTTCACCTG GCTACTATTA TCAATACCAA	1500
ATCGAGCGTC AAGGTAAAAC TGTTCCTGCA CTCGATCCCTT ACGCTAAATC TCTTGCTGCT	1560
TGGAATAGCG ACGATTCCAA GATTGACGAT GCCCATAAAG TGGCTAAAGC CGCCTTTGTA	1620
GATCCAGCTA AACTCGGACC TCAAGACTTG ACTTATGGTA AGATTACAA TTTCAAGACT	1680
CGTGAAGACG CCGTTATCTA CGAAGCTCAT GTGCGTGATT TCACTTCAGA TCCTGCCATT	1740
GCAAAAGACT TGACCAAACC ATTTGGGACT TTTGAAGCCT TCATTGAAAA ACTAGACTAT	1800
CTCAAAGACT TGGGTGTAAC CCATATCCAG CTCCTTCCAG TCTTGCTCTTA CTACTTTGTC	1860
AATGAATTGA AAAACCATGA ACGCTTGCT GACTACGCTT CAAGCAACAG CAACTACAAC	1920
TGGGGATATG ACCCTCAAAA CTACTTCTCC TTGACTGGTA TGTACTCAAG CGATCCTAAG	1980
AATCCAGAAA AACGAATCGC AGAATTTAAA AACCTCATCA ACGAAATCCA CAAACGTGGT	2040
ATGGGAGCTA TCCTAGATGT CGTTTATAAC CACACAGCCA AAGTCGATCT CTTTGAAGAT	2100
TTGGAACCAA ACTACTACCA CTTTATGGAT GCCGATGGCA CACCTCGAAC TAGCTTTGGT	2160
GGTGGACGCT TGGGGACAAC CCACCATATG ACCAAACGGC TCCTAATTGA CTCTATCAAA	2220
TACCTAGTTG ATACCTACAA AGTGGATGGC TTCCGTTTCG ATATGATGGG AGACCATGAC	2280
GCCGCTTCTA TCGAAGAAGC TTACAAGGCT GCACGCGCCC TCAATCCAAA CCTCATCATG	2340
CTTGGTGAAG GTTGGAGAAC CTATGCCGGT GATGAAAACA TGCCTACTAA AGCTGCTGAC	2400
CAAGATTGGA TGAACATAC CGATACTGTC GCTGTCTTTT CAGATGACAT CCGTAACAAC	2460
CTCAAATCTG GTTATCCAAA CGAAGGTCAA CCTGCCTTTA TCACAGGTGG CAAGCGTGAT	2520
GTCAACACCA TCTTTAAAAA TCTCATTGCT CAACCAACTA ACTTTGAAGC TGACAGCCCT	2580
GGAGATGTCA TCCAATACAT CGCAGCCCAT GATAACTTGA CCCTCTTTGA CATCATTGCC	2640
CAGTCTATCA AAAAAGACCC AAGCAAGGCT GAGAACTATG CTGAAATCCA CCGTCGTTTA	2700
CGACTTGGA ATCTCATGGT CTTGACAGCT CAAGGAACTC CATTTATCCA CTCCGGTCAG	2760
GAATATGGAC GTACTAAACA ATTCGGTGAC CCAGCCTACA AGACTCCAGT AGCAGAGGAT	2820
AAGGTTCCAA ACAAATCTCA CTGTGTCGT GATAAGGACG GCAACCCATT TGACTATCCT	2880

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TACTTCATCC ATGACTCTTA CGATTCTAGT GATGCAGTCA ACAAGTTTGA CTGGACTAAG	2940
GCTACAGATG GTAAAGCTTA TCCTGAAAAT GTCAAGAGCC GTGACTATAT GAAAGGTTTG	3000
ATTGCCCTTC GTCATCTAC AGATGCCTTC CGACTTAAGA GTCTTCAAGA TATCAAAGAC	3060
CGTGTCACC TCATCACTGT CCCAGGCCAA AATGGTGTGG AAAAAGAGGA TGTAGTGATT	3120
GGCTACCAA TCACTGCTCC AAACGGCGAT ATCTACGCAG TCTTTGTCAA TGCGGATGAA	3180
AAAGCTCGCG AATTTAATTT GGGAAGTCC TTTGCACATC TAAGAAATGC GGAAGTTTGTG	3240
GCAGATGAAA ACCAAGCAGG ACCAGTCGGA ATTGCCAACC CGAAAGGACT TGAATGGACT	3300
GAAAAAGGCT TGAAATTGAA TGCCCTTACA GCTACTGTTC TTCGAGTCTC TCAAAATGGA	3360
ACTAGCCATG AGTCAACTGC AGAAGAGAAA CCAGACTCAA CCCCTTCCAA GCCTGAACAT	3420
CAAAATGAAG CTTCTCACCC TGCACATCAA GACCCAGCTC CAGAAGCTAG ACCTGATTCT	3480
ACTAAACCAG ATGCCAAAGT AGCTGATGCG GAAAATAAAC CTAGCCAAGC TACAGCTGAT	3540
TCACAAGCTG AACAACCAGC ACAAGAAGCA CAAGCATCAT CTGTAAAAGA AGCGGTTCGA	3600
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CTTGCGCTCC TTGGTCTCGG TTTCTTACTA AAAAATAAAA AAGAGAACTA AACTAGCCCT	3780
CCTATAGAAA AATCCCCCAA GCATTATAGC TCGGGGGATT AATTTTGTGTA CAATATTTGT	3840
TGTCCTAATA AACTTGATTA GGATTTTITA TTAAGCCTCT TTCATAGCAA AATAACCTCG	3900
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CTGCTCCAAA TATTGCTCAT AACGCAATTC CTGCCAGTGC GGACGGTCTT TGGAAATAGC	4140
ATCCACCACT TGCCTTAGTCG GATGGAAATA ATCTTTCACC GCCTGCTCAC CATCTTCCGC	4200
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CCAATCTCAC GATAAGCCTG AATCAACTTT TTAAAAATAAC GTGGATTACC ACCAATAATA	4320
GCATATACAA TCGGTAGACC AGCCTGAGCA ATCTTCACTG TTGATTCCAC ATGACCACCT	4380
GTAGCTATCC ACAAGGGCAA TTTGTCCTGA ACTGGACGAG GATAAACTTC TTTACCAGCA	4440
ATCGTTTGAG TCAATCGACC TTGCCAGTCT AACTTGGTCT TTTCATTGAC TAACTGAAGC	4500
AACTCTAATT TCTCATCAA AAGAGAGTCG TAGTCTTTCA AGTCATAACC AAACAGAGGG	4560
AAAGATTCCG TGAAAGAGCC CCTTCCAGCC ATAATCTCCG ATCGTCCATT TGACAAAGCA	4620
TCGATAGTGG CATACTGTTG GAACAAACGA ATCGGGTCCA TGCTTGACAG AATGCTGACT	4680

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GCTGATACTG CAAAATCCGC CCGATGGTGC TCACCAATCC CATATACATC CAAACCAACC	4800
TTGTGAGCCA GCTCAATCTC TGCCACCAAC TGGCGAATGC GTTCAGCATG ACTGTAAGTT	4860
TGTCCAGTCC CTTCAAGCTC CGTTATTTC CCAAATGTTG AAATTCCTAA TTCTACCATT	4920
GTGATTCTCC TTATCTATCT CTGTACTTCA ATTTGAAAAA TTATTCTAAC ACGAATCTTG	4980
AGTACAAGCA ACCGATTTGC TCATTAGAAA AAGCCTAGAT AACTAGACTT TTTTAGCTTA	5040
TTCTACCGTT ACTGACTTGG CAAGGTACG TGGTTTGTCC ACATCGAGGC CACGGTGGAG	5100
GGTTGCAAAG TAAGCGACTA ATTGCGTTGG TACGACCATT GAAATTGGTG AGAGGTATGG	5160
ATGTACGGTC GTAAGGACGA TATCGTCGGT ATCTTTGGCT ACATTCTCTT CTGCGATAGT	5220
GAGGACTTTG GCACCACGGG CTGCGACCTC TTGGATATTT CCACGAGTAT GATTGGCAAG	5280
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GTGCTTGAGT TCTCCTGCAG CAAAGCCTTC AACTGGATA TAAGAAATCT CTTGAGTTT	5400
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TTGAACTTCC AACTATCAG CCTTGACGAT TACCAACTCT TGGTCATGGA TTTCCATGTA	6240
TTGGTTAGTT TCACGAATCA TAGCCATGGC GTCTGAGCAG ACCATGTTAT AGCCTTCTCC	6300
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GTCAACCAAG GCAAAGGCAT AAGAACCACG GATGATCTGA AGGGCTTTTT TGAAGCTTC	6420

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CTCAATCACC CCATTATGCA CCAAGACAAA ACGTTCCGTC TCAGAGCGGT GTGGGTGAGC	6600
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CTCAACACCA GCTGCTCTGG CAGACAATTC TGCAATACGA CCAACCGCCT TCACCAAATG	6720
GTTATCAGCA CCATCTAGGA CAAAAATTCC CGCAGAATCA TAGCCACGGT ATTCAAGCTT	6780
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TGATTTCTTC AGACGACGTT CTTGCGTTTC CAAGTCTAAT TCGACCAAC CATAGCGATT	7140
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ATTATAGTAA CGATTTGGCT CCACTTGGAA CCAGTAATCC CAGAGATTGT CTCCCTTACC	8340
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CCAATAATAG CCTTGAAGTC TAAACCACTA CGAGTGAAAA TACGCTCATA GGCTGCTTTG	9840
TACTCATCAT AAACACTATC CAAACTATCA TAGTTAGCGT GGAAACTATA AGCATCCTTC	9900
ATGATAAACT CACGTGTACG AAGAAGTCCA TTACGCGGGC GTTTTTCATC ACGATACTTG	9960

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GCACTAAGAA GGGCTGGAGC CAACATCTCA ACAGCACCAA TCTTTTCGAA TTCCTGGCGC	10200
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GCTGAAACTT GCGGAACATA ACCAGCACGC AACATAAGAG CATGGCTGAT AACTTGAGCA	10320
TCGCTTGGCA TTTCGCGAAG CGTTGGGATA GGCATTTTAC TTTGTTTCAT AATATTCCTC	10380
GATTATCTAA AAAAGAGTCG CATAATGTCA TTCCAAGTCA CAGCAATCAT CAAGACAACC	10440
ATGATGACCA CTCCGGCCAA GGTGACATAG GTTTCATTTT CTTGTTTCAA TGGTTTGCGG	10500
CGGATGGCTT CTAGGATATT GAGCACAATC TTACCACCAT CCAAGGCTGG AATCGGAATA	10560
AGATTAAAAA TCCCAATATT GATGGAAATC ATTGCCAAGA AGTACAAGAT ATTTTCAATT	10620
CCATTTTTAG CAGCATCACT ACTTGCCTTA AAGATAGCAA CAGGTCCACC CAACTTGTTT	10680
AAATCTCGTT GGAAAATCAG ATTTTTCAGA GCTGAGAGAA TTCGGAGAGC TGAGTCAGCA	10740
GCAGTTGTAA AACCACCTAC AAACATGGAT AGAAAATCTG ACTTAACCCC CGGTTGAACA	10800
CCTAGAAGGT AACGACCTTG ACTATCTTTG GGTGTAACAG TGACTTGTTC GTCACTCCCC	10860
TTTTTCAGAA TAGTCACATC CAAAGTCGGT GCCGTCTTAT CTTTGGTTTC TGTTCACACA	10920
GCTTGGATCA AGCTTTCCCA GTTGCTAACC TCATGTGAGC CAATCTTGGT AATTTGTGCC	10980
ATTTCTGGTA CTCCTACCTT GGCCAAGGCA CCTTGGGGCA TGATATGGAA CTGATTGGTA	11040
TCAACATCTC TGACACCACC CTGCATAAAG ATTAAACCC AAAAAACAAC GACACCTAAG	11100
ATAAAATTGT TCATAGGACC TGCAAAATTG GTAATCAGTT TGCCCCAGAT AGTCGCATTT	11160
TGATATTGAA CATCTAAAGG TGCAATCCGA ACCTCAGTAC CATCTGCTTC CACAACCGTT	11220
GCATCGTGAT CCACTGCAAA TGT'TTTTCT TCTTCAGAA CCAATCCTTT GATAAAGAGC	11280
TTGTCTTCAA AATCAAACCTG GGTACCTGC ATAGGGAGGG CTGTTTGATC CAATTTTTA	11340
CCTGAGAGAT TGATGCGTTT AACCTTACCA TCATCAGCAA GTGTCAAAC AACAGGCGTT	11400
CCTGTCTTGA TTTCAGTTGT ATCATCACCC CAACCGGCCA TGCGGACATA GCCACCCAGA	11460
GGCAAGATTG GAATGGTATA GGCCGTTCCA TCCTTGCCAA TGTGAGCAA AATTTTAGGT	11520
CCCATACCGA TGGCAAATTC ACGTACTAAA ATCCCTGATT TCTTGGCAA GTAGAAGTGA	11580
CCGAACCTCGT GCACCACTAC AATAATCCCG AAAACCAGAA TAAAGGTAA AATTCGAGC	11640
ATAGCGTTTC CTCCGTCTTT TGATTAAAG AGTCCAAATA AGTGCATGAT TGGAAATACA	11700
AGCAACATAC TATCGAAACG ATCCAAAACA CCACCATGTC CAGGGATAAA TTTCCAGAA	11760

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TCCTTAACAC CAAAATGACG TTTGATCGAA CTTTCTAGTA AATCACCAAA TTGTCCAGCA	11820
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CTGTCAACTA TCATAAGGAT AATGGTTACT AAAATTGCTC CTAAAATACC ACCCAAGGCA	11940
CCCTCAAGGG TTTTATTAGG CGATACCCTT GGTGCTAACT TTCGTTTCCC ATAGTTCATC	12000
CCAACAAGAT AGGCACCACT GTCTGTCGCC CAGACGATAC ACAAGGCTAA GAGAGCCTTG	12060
TCCAAACCTG CAACACGAGC ATCTAGTAAA GCATTAAATC CAAAGCCCAC GTAGAAGCTC	12120
ATAGCAAGAG GGAACCACG ATCCTCAATC GTATAAGACT TGCTAAAAAC GGTGCTTCCT	12180
AACATGATTG AAATCAAAAC ACTATAGGCA ACCACATTCC CATCAACTGG CAAAAAGTC	12240
AGGTAATTCT CCAAGGGAAT GGTCAATGCA AAGGTTGCAA AGAGGGTCAA GAGGCCCTCC	12300
ATCGTCATGG TCTCTAGACC TCTCATCTTC AAAAGTTCAT GCATGGCTAG CATGGCTATG	12360
ATTCGATTG CTATCTGAAG CAAGAGGCC CCAATCATTAA AAATTGGTAG GAAAATAGCC	12420
AGGGCAATCC CTGCAACAA GGTCTTTTC TGTAATCCT GGGTCATATT TCCTCCTAAA	12480
CTCCTCCAAA TCGCGATGA CGACGATTAT AGGCAAGAAT AGCTTCCTGC AAGGCCGCTT	12540
CGTCAAAATC AGGCCATAAG GTGTCCGTAA AATAAGCTC ACTATAGGCT CCCTGCCATG	12600
GAAGGAAATG GCTCAAACGT AATTCTCCAC TAGTACGGAT AATCAAGTCT GGGTCTCGTA	12660
AGTCCTTAGG CAAATGCTGA GTAAAGAGAT AGTTACCAAT CAATTCCTCT GTGATGTCAC	12720
CTGGGTGAT TTTGGCATCT AAAACATCCT GGGAAATCAA CTTAAGCGCC TGTGTAATCT	12780
CAGCACGTCC ACCATAGTTA AGAGCAAAAT TAAGAATCAA TCCTGTGTTG TTCTTAGTCA	12840
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TCATTTGAAT CTTAACATTA TTCGCATGTA GTTCCGGGAC ATAATTATCA TAAACTCTA	12960
CTGGCAAGTT CATGATAAAC TTGACTTCCT GATCTGGACG GGTCCAGTTT TCCGTAGAAA	13020
AAGCATAGAC CGTAATAACC TTGACGCCCA GTTTCTTGGC TGCCTTGGTC ACGGTTTGCA	13080
ATGCTTCCAT GCCCGCCTTA TGTCCAAAA CTCGCGGTG CATACGTTT TTAGCCCAAC	13140
GGCCATTGCC ATCCATGATG ATGCCGATAT GAGCAGGAAC CTGTGTCGGA ACCTCTACTT	13200
CCACAGCCTT ATCTTCTTA AAAAATCCAA ACATGATCTT ATTCCTATTC AAAAACTAT	13260
CGTTTCATTA TACCATATTT CCCCATTTTC TTCTATCACT AAGCTATTTA TTCTCAGGCA	13320
CCAAGCCCAT TTTTCAAAAA AATAAGCCGC CTGATTGGGC GACTTTATTT TTATAGGGAG	13380
ATTATTATGA AAAAGTTTAA GGAGTTTAAG TTAAGGTCTT CTTAACTTAT GAACTTAGTG	13440
TACACTCCCT AGCTTAAAGT TTCCTTAAAG ATTTTAAAA ATCAAATTTT TCCATTTCTC	13500

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CTGCCAATTT TTCTTGATA AACGTGTTTG ATAGAGTTCC ATTCGGTCTT CATTTTCTAA	13560
GAAATGAGGA GTTGGACGAA CTTGAAAAAT CAAAATATCC TCCAAACCAT AAGGTACATA	13620
GAGTTCAAAA TCTAATTCTT CATTCAGCG CAGTCCAACT GCCGTACACC GTTCTGGATA	13680
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CAGTAATAAG GTTTCCTCAT AAGAAAAATC TGGATCAAAG AAAATCACAT CTATATCTGT	13860
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TGCTGCCAAC CACGAGTCTT TCAAACCAAG GTCTCGGATG ATCGTCAGAA TGGCCATCAT	13980
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CTTTTGAAT CAAGTAAGGC TCATACATGT CTTCAACTGT CTCACGCTCT TCGGCGATA	14160
TCACAGAAA AGTTCTCTAGA CCAACAGGTC CTCCACTGTA CATCTCAATC ATGGTGCGAA	14220
GGATTTTGTG ATCCACATAG TCCAAACCTT CATGGTCAAC ATCCAGCATA GTCAAAGCCT	14280
TATCGGTAAT AACATCATCG ATAACCCCAT TCCCCATTAT CTGGGCAAAA TCGCGCACGC	14340
GCTTGAGGAG ACGATTGGCA ATACGAGGGG TTCCACGACT ACGTAGGGCC AACTCAGATG	14400
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AGTCAGCATG AGCATAATAC TCCATATGAC CTGTAATCCC AAAACGTGCC CGTAGTGGAT	14520
TTGAGAGCAT ACCAGCCGA GTCGTCGCAC CAATCAAGGT AAAAGGAGGC AACTCCAAAT	14580
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CATCTCCAGG CTCTAAATCA TTCAAAATCG CTACCAAATC ACCCGCTTTT TCGATAACAG	14760
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TTTTCCCAAG CCCTGGAGGG CCAAATAAGA GCACATGATC CAGCGCTTCA TCCCGCATT	14880
TAGCGGCTTC GATAAAGATC TGAAGTTGAT CCTTAACCTT ATCCTGACCA ATATATTCAC	14940
GTAAATACTG AGGACGGAGC GTGCGTTCTA CTAACCTCTC ATCACCCTATC ATCTCATTAT	15000
CTAAAATTCT ACTCATGGCT CTATTATATC AAAAAAACA AGCCACAAAC AAAAAAGCCA	15060
CCTGATTGGG TGAATCCPAA GTTTAGCACT TATGTGGTAT AATATTATAC GGCATTCTTA	15120
CACCGCCTAC GAAAGGAGGT GAGATAGCCC ATGATGGAAT TAGTACTCAA AACTATTATC	15180
GGACCAATTG TGGTCGGTGT CGTTCTTCGT ATAGTCGATA AATGGCTAAA CAAGGACAAA	15240
TAGTGTCAA AAAGACCTCA AGCTTATTTG GTCGTGAGCT TGGGGTCTTT TCTAGCCTAT	15300

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GATATAGAAC TAGTACTCAA TTCCTTTTTA TTATCCCATA GTTCACGAAT TTTGTCAAAA 15360
 CTTTACATTT TCTTCAACCG CTGTACGACA AGACGGTTAA GATTAAGAGA ACGTTAGGGA 15420
 TTCTATCAAT TTCATAGAAA TTTTGATTTT GTAAACGAAG AGACAATCTT ACATGTCACT 15480
 TCTCATTTAA TACGCCACTA CTAGACAAGC AAAATCATT TACAGTAGT TCCAGTCCCT 15540
 CAATTAACAG TCACTTACAA TCAAATTGAG TTTGAACTAG CTGAAGCGAC CACAGACCTA 15600
 TTTCTTAGTC ATATTCGCTA AAAAAATCCC CGCCAAAATC TCAAAAAGTC CCCGCCAATT 15660
 CCCCGACCAA AATCCGAAAA ATACCGAAAA ATATCGAAAA ATTATTTTTA GAATAGTCCC 15720
 AAAAAATCTG AAATAGAGCT AAAAACTCC ACCTGATTCG GTGGAGTTAA GGGAGATTAT 15780
 TATGAAAAAG AAAAGTTTAG GATTTTATTA AATAAAGTTA GGAGGTCTTT ATTTAATAAC 15840
 TACATGATAC AAGACGAAAC TTAAACTAG CTTAACTTTT CTAAAATTTT ACTATTTTGC 15900
 AAAAAATTTC TATCACCAGC ACCTCACCAA TCGAGTAGGG GATAATCTCT AGCCCCTCTC 15960
 ACACCACCGT ACGTGCCGTT TGGCATACGG CGGTTCAACT AACTTTTAAC GCATGTCGTT 16020
 CAAGGTAATA ATCCAAACAC GAAACCAGTC CACGTTTTTC CAGGACTGCT TTTGATATAG 16080
 CACGTTTAAG TACCGACTTC TGAGCTACTA ATTGATAATG GTCGCCCCAG CCAGATACCT 16140
 TATCTGTAT CCATTTAGGA ACTCCTAACT TAAGCAATCC CCATAATCGT CTCGATTTCT 16200
 TCTCCATTG CTTCCAGATA ATCACTCGTA GCGAGTACG CAAGCGCTCA TCTATGCTGG 16260
 CGACTATACT TTTCATATTT CCCAATGAGC AATAGTTTAT CCATCCTCGA ATAGACAAAT 16320
 TCAGTTGCTC AATACGTCTT GTTAGGTCTA TACTCCATTT CCTCTGTGTT AGTTTCTTCA 16380
 ATTTAAACTT AAATCTCCGA AACTATCTT GATGTGGACG GCTTTTCCAA CCATCTGATA 16440
 ATTTCCAGAA CCCAAAACCT AGATATTTCA ACTCTCTTGG TCATGTTTAC TTTCAAACCT 16500
 AGCCGTTTCT CAATAACGA CTGACTGAAT ACATC 16535

(2) INFORMATION FOR SEQ ID NO: 75:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 8136 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 75:

CCAGAGCGTT GCGTCCGAAA GTCTATCCAG ACACGGCTCT TTAAAAACAA AAGGAGAAAT 60
 GATGCATACT TATTTGCAAA AGAAAATTGA AAATATCAAA ACAACCCTAG GTGAAATGTC 120

618

AGGTGGTTAC CGTCGTATGG TTGCGGCTAT GGCTGATTTA GGATTTTCAG GAACTATGAA	180
GGCTATCTGG GATGACCTCT TTGCCCATCG TAGTTTIGCC CAGTGGATTT ATTTGCTGGT	240
TTTAGGAAGT TTTCTCTCTT GGCTGGAGTT GGTTTACGAA CATCGTATTG TTGACTGGAT	300
TGGGATGATT TGTAGCTTGA CAGGGATTAT CTGTGTAATC TTTGTATCGG AAGGTCGAGC	360
AAGTAATTAT CTTTTTGGCT TGATTAACTC TGTATTTTAC CTTATTTTGG CCCTACAGAA	420
AGGCCTTTAT GGTGAGGTGC TGACGACACT TTACTTCACA GTCATGCAGC CAATTGGACT	480
TCTAGTTTGG ATTTATCAGG CACAGTTTAA GAAGGAAAAG CAGGAGTTTG TCGCGCGTAA	540
ACTGGACGGC AAGGGCTGGA CAAAGTATCT TTCCATTAGT GTGCTTTGGT GGTGGCCCTT	600
TGGCTTCATT TATCAGTCTA TTGGTGCCAA TCGTCCCTAT CGTGATTCAA TCACAGATGC	660
AACCAATGGG GTAGGGCAAA TCCTCATGAC AGCTGTTTAC CGTGAACAGT GGATATTCTG	720
GGCGGCTACC AATGTCTTTT CAATCTATCT CTGGTGGGGA GAAAGCCTGC AAATTCAGG	780
GAAATATCTA ATTTATCTCA TTAACAGTCT AGTTGGTTGG TATCAATGGA GCAAGGCAGC	840
TAAGCAGAAT ACTGATTTAC TTAAGTAGGA AAAGATGTTT GAAAGTGCTG TTTTGAGATT	900
TCGATTAAAA CAGATATAGT TGATAATCAA GGATTTATAG TATGAAAAAG AGGATCGGCG	960
GGTCTCTTTT TGTGTTGAA AAGATAAAAA ACTCAGTAAC CTAGAAATAA GACAACTGAA	1020
GCTTTACTCT ATATTCAATT TTTAGGAATG AGAAGGTCTA GATAAAATTG GACAACTTCC	1080
TGGTCTGTGA AATCTTGACC TTTTTTGAGC CACCAGGTCA ATGTCTCGAT AAAGTTGCAC	1140
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CGTCCACAT CTGCGAGATC AATGATATCC TGAACAGTAG TGGCCTCGTA GCCCTTAGCA	1500
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ATGTTAGTCA TATGGACACT TAAGGCAAAT TGTTCAGAAC TGAATAAAGC TGACGTTTTG	1620
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TAGAAACAAT CTCCAATCGT GAAGAAGACA ATCAGTACAC CTTGGCCTAT AAGCGGTTTA	1920

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GCCTGCTAGG AGCCTTGGTA ACAGCTGTGA TTCTCGTAAC GGGCTCTGTT CTAGTCATTT	1980
TGGAAAATGT CACGAAGATT TTGCATCCGC AACCAGTCAA TGATGAGGGG ATTCTCTGGT	2040
TAGGAATTAT TGCATTACT ATCAATCTGT TAGCGAGTCT GGTGGTTGGT AAGGGAAAGA	2100
CAAAGAATGA GTCTATTCTG AGTCTGCATT TTCTGGAAGA TACGCTAGGG TGGGTAGCTG	2160
TTATCCTGAT GCGGATTGTT CTTTCGATTTA CGGACTGGTA TATCCTAGAT CCTCTTTTGT	2220
CCCTTGTCAT TTCTTTCTTT ATTCTTTCAA AAGCCCTTCC ACGTTTTTGG TCTACACTCA	2280
AGATTTTCTT GGATGCTGTG CCAGAAGGTC TTGATATCAA GCAAGTAAAG AGTGGCCTGG	2340
AGCGATTGGA CAATGTGGCC AGCCTTAATC AGCTTAATCT CTGGACTATG GATGCTTTGG	2400
AAAAAATGC CATTGTCCAT GTTGTCTAA AAGAAATGGA ACATATGGAA ACTTGTAAG	2460
AGTCTATTCTG AATTTTCTTA AAAGATTGTG GTTTTCAAAA TATTACCATT GAAATTGATG	2520
CTGACCTAGA AACTCACCAA ACCCATAAGC GAAAGGTGTG TGACTTGGAA CGGAGTTATG	2580
AGCATCAACA TTAGAAAAA GTGAAAAATA CTTGGGTACT ATCTTATTTG GAATAGAGTA	2640
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CGGCGGGTGT CTCTGTAGAT AGTTTAGTTG ACTATATGTC GCTCTACCAA AAGGGAGATG	3060
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GTGCACACGA AGCGATTGGG ATTGTTGAAG AAGCTGGGGA AGCCATTACG ACGGTGAAAG	3420
CAGGTGATTT TGTGATTGTC CCTTTTACAC ATGGATGTGG TGAGTGTGAT GCCTGTCTTG	3480
CTGGATTGTA CGGTCTTGC GACAATCATA TTGGCAATAA TTTGGGGGGT GATTTTCAGG	3540
CAGAATATAT TCGCTTCCAC TATGCAAAC TGGCGCTGGT TAAATCCCT GGTCAACCTT	3600
CTGACTATAC AGAAGGGATG CTCAAGTCCC TTTTGAATCT TGCAGATGTC ATGCCGACAG	3660

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GCTATCATGC GCGCGTGTT GCAAATGTTC AAAAAGGGGA CAAGGTTGTT GTTATCGGTG	3720
ATGGGGCTGT TGGTCAATGT GCTGTCATCG CGGCTAAGAT GCGTGGAGCA TCACAAATTA	3780
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AGCATGGTCA GGCTAGGGAT TTTCCGACCG TGGAGGACTT CCTTGTTAAG AATATCCATA	4380
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GGCGGAAGTT GGTCTCCCAA GCTCTGAATG GCCTCCTTCA TTAAGTCATA GCCAGACTGG	4620
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TGCTTGGGTT TGTGGGACTC GCCTGTCTTG AGGTGCTTGG TGTAGCCCAG CTCTTCAGCA	5160
ACGGTTAAAA TACGGTGTCT GGTTCCTTCT GTAACAGATA GGCTCTGGTC GCGGTTGAGG	5220
ACGGGGGATA CGGTGCGGAT AGAGACAGAG GCTAGCTGTG CAATGTCTTT TAAGGTAGCC	5280
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GATTACACGT TAAGATGGCT TAACGGACAG TCAAAGGAGA ATTCATATGG CACAACATCT	5460

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TACTACTGAA GCCCTTCGCA AAGACTTTCT TGCTGTTTTT GGTCAAGAAG CAGATCAAAC	5520
CTTCTTTTCA CCAGGCCGCA TTAATTTGAT TGGTGAACAC ACAGACTACA ACGGTGGGCA	5580
CGTTTTTCCT GCTGCTATTT CCTTGGGAAC TTACGGTGCA GCTCGTAAGC GTGACGACCA	5640
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TGCTGGCTGT GCcATTGCCT TGGTTCAAAA AGATACTGTT GAGGCCTTTA AGGAAGCTGT	6540
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TATCGCTTAT CGTGTTCCAT CTGACTACGG AGAACTTGAA ATTACCATCA ATCTCTCTAA	7080
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TCAGTGTGAG CTTTGTCTAG AGAATGAGGG CTACCATGGT CGAGTTAAAC ACCCAGCTCG	7200

622

TAGCAATCAC CGTATTATCC GTTTGTAAAT GGTGGGTGAG GAATGGGGTT TCCAGTATTC	7260
GCCCTATGCT TACTTTAATG AGCATTGTAT CTTTGTAGAT GGCCAGCATC GTCCCATGGC	7320
CATTAGTCGT CAGAGTTTGG AACGCTGTGT GGCTATCGTA GACCAGTTTC CAGGATATTT	7380
TGCTGGATCT AATGCCGACC TGCCGATTGT GGGGGGCTCT ATTCTAACTC ATGATCATTA	7440
TCAGGGAGGC CGTCACGTAT TTCCTATGGA ATTGGCTCCC TTGCAAAAGG CCTTCCGATT	7500
TGCTGGTTTT GAGCAGGTCA AGGCTGGAAT TGTCAAGTGG CCCATGTCTG TCCTACGTTT	7560
GACTTCGGAT TCCAAAGAGG ATTTGATCAA TTTGGCTGAT AAGATTTTGC AGGAATGGCG	7620
CCAGTATTCA GATCCTGCAG TGCAGATTTT GGCAGAGACA GACAGGACAC CGCATCACAC	7680
TATCACACCC ATTGCCCGCA AACGCGATGG ACAGTTTGAG TTGGACTTGG TCTTGCGAGA	7740
CAATCAGACT TCAGCAGAGT ATCCTGATGG TATCTATCAT CCCACAAGG ATGTCCAACA	7800
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TCTGAAAGAA GAAGTGGAGC AAGTCGCTAG CTATCTTGTA GGAGAAGCTG TTACAGTTGC	7920
CGATTATCAT CAGGAGTGGG CAGACCAACT CAAATCCCAA CATCCAGACT AACGGATAAA	7980
GAAAAGCCC TTGCAATCGT CAAGGACTCT GTGGGTGCTA TCTTTGCGCG TGTACTTGAG	8040
GATGCAGGAG TCTACAAGCA GACAGAACAA GGGCAGACAG CCTTTATGCG CTTTGTGGAA	8100
CAGGTCGGAA TTTTACTAGA CTAGGAGCTT TCTCGG	8136

(2) INFORMATION FOR SEQ ID NO: 76:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 10011 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 76:

CCCATAGTGA AGAGTGGCCA TAAGAAGGTC TTCTAGGCTT AATTTAGGTT TCGTCCACC	60
TTTTCGCTGT TTAAGTTGAT AAGCTGTTTT TAACACAGCT GAACATCTCT TCAAAAGTCG	120
TGCGCTGAAC ACCAACAAGA CATTTAAATC GTGTATCAGT TAGTTGTTTA CTTGCTTCAT	180
CATTCATAGA ACTACTATAC CATGTTTTGT TTCGCAGGAA GTCTAATATT GTCAAATACT	240
GGAACGCTCA TTGCTGGGAT ACGGAATAAG ATTGGCCCAG CTTCGATAAC TGGGATACCT	300
GGTTCAAAAC CAAGGTCTGT TGCAGCGATT GGTGTAAAGA TATCGTAACC TTTCATAAGG	360
TCTTCGTTTA CATCTTTCAC CATAACTGCA TCACAGTGAA CATCGTAACC ACGGTTTGAA	420
AGTTCTTCIT CTAGAGCACT TTTAATTTGG TGACTTGAGT TAACACCTGC ACCGCAGGCA	480

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GCAAGAATTT TAATCATTG GATTCCTCC GATTTTATTT TTTAATAGAC AAGATTAAGC	540
GGTTGCTTCA GCAATGTAAG CATAAAGGC TTCTGCTTCA GAAATTTTG ATAGGTCTTC	600
AAGATGACCA TTTCCTGTGA AGAAGTCCAT TAACTGAGCA AGAATGTTG TTTGACTTGA	660
ACTTGAATTA TTGATGATAA AGAAGAGCAA GGATACTTCT ACTTCCTTAC CTGGCGCAAT	720
CATATTATGG AAAGTCACCG GTTCTCTAA TCGAACAACC ACCACTTCT CAGCTAGATT	780
ATGAACAATA TCTGTGTGAG GAATCATTAC ATTTGCAAGT CCTTCCTAG AAATTCATA	840
TATAAACAG TTGGAATGA CTTTTCACGC GTGATCAAG CTCACGATA AGTTGGAGTG	900
ACAATTTCTC GTTCTTCCAA CAAGCTTGCT ACCTGATCAA AAAGTTATTC TTGATTATCC	960
GCTTCTAAGC AAAACACAAG GTTTTGTCA AAGAAATAAT CTAATACCAT AAGGTTTTC	1020
CTTCTTTCCA TTAACTTTAT GCTATAAGTA TAACACTATA TGAAATCGTT GTTAATTACT	1080
TTCTATTCTT TTTTGTCTCT TTTTATAT TTTTGTTTG TTTATAGTTT GTTATATAAA	1140
AATAAACACA CAAACAAATA CTCCAAGCAT TTTCTGTTC TAATACTCAA TGAAAATCAA	1200
AGAGCAAAT AGGAAGCTAG CCGCAGTGT TCAAAACACA GTTTTGAGGT TGTAGATGAA	1260
ACTGACGAAG TCACTCAAAA CATGGTTTGT AGGTGTAGA TGAACTGAC GAAGCAACAg	1320
CCATACATAC GGTAAAGCGA CGCTGACGTG GTTTGAAGAG ATTTTGAAG AGTATAAAAA	1380
CTAAAAAGC AGACCATCTA AGCCTGCTTT ACTATTGATT CTTATATAAA TTTCTGTGA	1440
ACAAGGAAAG GCATTTCTGA TAACTTATTC TTCATCCATA CTCAAGACCG TGAGGAAGGC	1500
TTCTTGCGGA ACTTCAACTG ATCCGATGGA TTTTCATGCGT TTCTTACCAG CTTTTGTGTT	1560
TTCAAGGAGT TTACGCTTAC GAGAAACGTC ACCACCATAA CATTTAGCAA GTACGTTCTT	1620
ACGAAGGGCC TTGATATCAG TACGAGCGAC AATCTTGTGT CCAATAGCCG CTGGGATTGG	1680
AACTTCAAAT TGTGGCGAG GGATGATTTT CTTGAGTTTA TCAACGATGA GTTTCCACG	1740
TTCGTAGGCA AAGTCCTGT GAACGATAAA GCTGAGGGCA TCCACCTTAT CTCCATTGAG	1800
AAGAATATCC ATTTTCACCA GCTTAGATGG GCGATATTCT GACAATTCGT AGTCAAAGCT	1860
TGCATAACCA CGTGTGAAG ACTTAAGTTT ATCAAAGAAG TCAAAGACAA TTTCAGCAAG	1920
AGGAATTTGA TAGATAACAT TGACACGTT ATCATCAATA TAGTCCATAG TCACAAAGTC	1980
CCCACGCTTA CGCTGAGCTA GCTCCATTAC TGCTCCGACG AACTCCTGTG GTACCATGAT	2040
TTGCGCCTTG ACATAAGGCT CTTCAATGGT CGCAATCTTA GTTGGGTCTG GAAACTCAGA	2100
TGGGTTAGAC ACATCCATAG ACTCACGTC GGTCAAATTA ACTTTGTAAA TAACAGACGG	2160
AGCTGTCATG ATGAGGTCAA TATTGAACTC ACGCTCTAAA CGTTCCTGGA TAACATCCAT	2220

624						
ATGGAGAAGT	CCAAGAAATC	CACAACGGAA	ACCAAATCCA	AGTGCCTGAG	ATGTTTCTGG	2280
TTCAAACCTGA	AGACTAGCAT	CATTTCAGTTG	CAATTTTTC	AGCGCTTCAC	GCAGGTCATT	2340
GTAATTGTTT	GATTTCGATTG	GGTAGAGACC	CGCAAAGACC	ATAGGATTCA	TCTGCTTATA	2400
ACCATGTAAT	GGTTCCTGCCG	CAGGATTGGT	TGCCAAGGTA	ACGGTATCAC	CCACACGAGT	2460
ATCCTGAACC	GTCTTGATAG	ACGCCGCAAT	GTAACCAACA	TCACCAGTCG	CAAGGAAATC	2520
ACGACCAACC	GCTTTTGGTG	TAAAAATACC	GACTTCGGCC	ACATCAAAGG	TCTTACTATT	2580
GCTCATGAGC	TGAATCTTAT	CACCAGGTTT	GACCACTCCG	TCCATGACAC	GCACTTGGAG	2640
GATAACCCCA	CGGTAAGCAT	CGTAAACAGA	GTCGAAAATC	AAGGCCTTAA	GTGGCGCCGT	2700
CACATCACCC	GTTGGTGCTG	GTACTTTTTC	TACAATTTGC	TCGAGGATTT	CTTCAATCCC	2760
AATACCAGCC	TTGGCAGAAG	CCAAAATGCG	TTCACTGGCA	TCCAAACCAA	TCACATCTTC	2820
AATCTCTGTA	CGCACGCGCT	CCGGATCTGC	AGCCGGCAGG	TCAATTTTAT	TAATGATAGG	2880
CATGATTTCC	AAATCATTAT	CCAAAGCCAG	ATAAACCTTG	GCAAGAGTTT	GAGCCTCAAT	2940
TCCTTGAGCC	GCATCGACCA	CCAAAATAGC	ACCCTCACAG	GCAGCTAGCG	AACGTGAAAC	3000
TTCATAGGTA	AAGTCAACGT	GCCCTGGTGT	GTCAATCAAG	TGGAAAATAT	AAGTTTCCCC	3060
ATCTTTTGCA	GTGTAATTCA	ACTCGATGGC	ATTCAACTTA	ATAGTAATTC	CACGTTCCCCG	3120
CTCTAGCTCC	ATGCTATCCA	AAAGCTGGGC	CTGCATTTC	CGACTTGAAA	CCGTCTCTGT	3180
TTTTTCCAAA	ATGCCGTCTG	CTAGAGTTGA	TTTTCCGTGG	TCAATATGGG	CGATAATAGA	3240
GAAGTTACGG	ATCTTCTCCT	GTCGTTTTTT	CAATTCTTCT	AAGTTCATGA	TTCTCTTCCT	3300
TTCAGGGTAT	CTATTTATTA	TAAATTGTTT	TTGATATTTT	GACAAGACCA	TACCTGCTA	3360
GGAGTACTAA	TCTTCAGCGA	CAAAGCCGTC	ATTTTCGATA	AAGTGGTGTT	CTGTCAATTCC	3420
TTGGTCTGTA	AAGACAATCC	CGTGAAGGAC	ACCACCATAA	ACAGCTCCTC	CATCCATTCC	3480
AATCTTGCCA	TCTTCTGTAG	TCCAAAGCTC	AGATGTACCG	CGTTCTTGCT	GTAACAAACC	3540
ATAGACCCGT	GTATGACCGA	AGACAATGGT	TTTTCCAGTA	TGATTTTCAG	CTCCGTGGAA	3600
TGGTTTTCTA	AGCCATACTT	TTTTATAATC	TGTTGTTTCA	TGCCAGTCGT	CCAAGGTCAA	3660
ATCAATACCT	GCGTGAACAA	AGATATACTT	GTCTGTCTCT	ACTACAAATG	GCATTTGACG	3720
AATGAATTCG	ACCAAGTCTG	CCGCTTCAGC	GgCAACCCGC	TTGGCATCTT	CTACTCCAATC	3780
AACTGGTGCA	TCCAAGGGAC	GACCTAGGAT	AGAGTTAATG	GTTGTATCTC	CACCATGCG	3840
ACTATAATGG	TCATAACTTT	CTTCTGGGTC	ATCTAGCCAA	GTCAAAAACA	TATACTCGTG	3900
GTTTCCGGAC	AAACAGATAG	CCCCTTGATT	GTCCACCAAG	TCCTTGACCA	TTTCAAGAAC	3960
ACGGTGACTA	TCCTCACCTC	TGTCAATCAA	ATCACCTAGA	AAGAGCAACT	GGGGCTGACC	4020

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ATCCCAGGTT TTGAGAAGGT CTTCCAGCAT CCCAGCTTTT CCGTGAACAT CTCCAATTAC	4080
ATAATAATCT GTCATCTTAT TTCTCCCTGT TTCTCAACAA TTCTCTTGCT TGCGTCAGGG	4140
CTGCTTCTGT CACATCATCA CCTGCCAACA TCTTGGCAAC TTCCTCCACT CGCTCTTCGA	4200
CCGTCAAGAG ACGAACAGTC GAAACCGTTG AATGGTCATT ACTAATCTTC TCAATAAAGA	4260
ATTGATAATC TGCAATCGCA ATTACTTGTG GCAAATGGGA GATAGCCAAA ACCTGACCAT	4320
GCTGACCAAT TTTATGAATT TTCTGAGCAA TAGCTTGAGC AACACGACCT GAAACTCCCCG	4380
TATCCACCTC ATCAAAGACA ATGCTAGTCT TGCCTTCTTT ACGTGAAG GCAGACTTAA	4440
TGGCTAACAT GAGACGAGAT AATTCCTC CAGAAGCAAC CTTAACCAAG GGTTTAAAGT	4500
CTTCTCCAGG GTTGGTTGAA ATATAAAACT CAACCATTTT ATTTCCCTCA CGACTGAATT	4560
TTCCCTTACT AAAACGAACC TGAAACTGGG CTTTTTCCAT ATAAAGATCT TGCAGTTCTT	4620
GTTAATCTC AGCTTCGAGT TGCTGAGCCA AATTATGACG AGCAGAAGCA AGTTGACCTG	4680
CCAAATTGAC AAGATTGACT TCCAATTCT TAAGCTCTGC TTCCATGTCC TCAGACGAAA	4740
GATTATTGCC TGTCAAGAGA TTGTATTCTT CCGTAATCTT GGCAAAATAA AGCAAAACAT	4800
CATCAACAGT CCCACCATAC TTACGAGTAA TAGTATGAAG GAGGTCCAAA CGATTCTCAA	4860
CCTGCATCAG GCGATTGCCA TCAAAATCAA GGTCTCAAT GATAGCTTCC AAACGTTTGC	4920
TAATGTCTTC TAAACATAG TAGGTCTCAG ACAGATAGCT TGAATTTC CGGTATTTCAG	4980
GATCATACTC TTCGACACTT TCCATGTCTCAT TCATAGCTGA ACGAACATTG GCCAGACTTG	5040
AAAAATCTTC ATTGTCCAAC ATACTGTAGG CATTTGGTCAG TGTATCCGCA ATATTTTTGT	5100
GGTTGAGGAG TTTATCTCGC TCTTGATTGA GAGCCAAGTC TTCTCCAGCC TGCAAGTTTG	5160
CTGCCCTCAAT CTCTGCCATT TGAAATTCCA ACATTTTCGAT ACGTGCCTTG TGTTCCTGTT	5220
GGTTTTTCTT GACTTCCAGA ACCTGCTTGC GCATTTTCCG ATAGGCATCA AAACCTCGTT	5280
GATAGGTTTC TTCAAGTCC CAAAAGCGG CATCACCAA TTCATCCAAC ATCTGGATAT	5340
GCAGTTGGGG ACGCATTAA TCCTCATGGT CATGCTGACC ATGAATATCT ACAAGATGTT	5400
GCCCAATAGC TCGCAAAACA GACAGATTAA CCATCTGACC ATTTACACGG CTGATACTAC	5460
GACCATTTTG CAAGATTTC CGACGGATGA TAATTTTCATC ACCTAATTCT AAACCTTGCT	5520
CATCAAAAAT TTCTGTAAA AGACGACTAT TCTCAACTGA GAAAAGCCCC TCAATCTCTG	5580
CCTTTGGTGC ACCATGACGA ATAACATCTG TCGTCGCACG AGTCCCAAC ATCATATTCA	5640
TGGCATCAAT GATAATCGAC TTCCCTGCAC CCGTTTCACC AGTCAGGACA GTCATCCCCT	5700
TTTCAAAATT GAGGGAAATA GCCTCAATAA TGGCAAAGTT TTTTATCGAA ATTTCAAGTA	5760

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ACATATAGAC CTACCAATTT TTTACTTGTT CAAAGATTTC CTCTGCTAGA CTCCACTTC	5820
TGGCAATGAC TAAATCGAG CTATCATCAG TCAACAGCT AAAATCTTG TCTGCAAAAG	5880
TCTCGATTAA CTGAGCTTTT AAAAAAGCCG TATTTCTGG AATAACTTG AGATTGATCA	5940
TCTTATCCAT CAATTCAGCC GATTCGATAT TGTCTTCAGC CAGTTCGAGA CTTTTACGA	6000
TTGATTTTGG CAATTCGTAG ACATAGGTGT TGTCTCTCAA AGGAATTTTG ACAATACCTA	6060
ACTCTTTGAT ATCTCGGGAT ACCGTCGCCT GAGTGGCAGT GATACCTGCT TCTTCAAAT	6120
GTTCTACAAT TTCTCTTGC GTGCCGATT TATAATCTGT CACCAATCTT CTAATTTTTT	6180
CAAGTCTCTC TTTTTATTTC ATTTTAAAT TGAATATGCG CCTCTCTAC TGCTTCTTTA	6240
ATCTCAGCAA GAATCTGATT GCTTGCTGAC TTTCTTTTT TCAAATACGC TAAAAATTCA	6300
ATATTTCCAT GTCCACCTTG GATGGGAGAA AAGTCCAAGC CAAGGACTGA AAAACCTACC	6360
TCTACTGCCA TAGCTGTTAC AGATTCAAGG ACATTCTGAT GAACCTTAGC ATCTCGAATA	6420
ATTCATTTT TCCCAATCTG CTCACGTCCT GCCTCAAAC TGGGTTGAC AAGTGCTACC	6480
ACCTGACCTT GATCAGCCAA GACACGGTGC AAGGCTGGCA AAATCAGACT AAGGGAAATG	6540
AAACTCACAT CAATACTGGC AAAGCTCGGC TCCTGCTCGA AATCAGTCTT TTCAGCATAG	6600
CGGAAATTGA ACTGCTCCAT GCTGACAACT CGTGGGCTT GCGTAATTT CCAAGCCAAC	6660
TGATTGGTAC CAACATCGAC TGCAAAGACC AACTTGGCAC TATTCTGTAG CATGACATCG	6720
GTAAACCTC CAGTAGAGGC CCCGATATCA ATCGTAGTCG CGCCATCCAC CGACAAATCA	6780
AAGACCTGCA AGGCCTTTTC CAGTTTCAA CCACCACGC TGACATACTT GAGTTTCTCC	6840
CCCTTGAGTT TTAATTCGGT GTCATCTGGA ATTTCTCTC CTGGCTTGTC AAACCGTTCT	6900
CCATTAAGGA CTGCTACGAC TAGGCCAGCC ATCACACCTC GCTTGGCCTG CTCTCTCGTT	6960
TCAAACAACC CCTGTTTATA AGCTAGTACA TCCACTCTT CCTTAGCCAT TGATTCTCAA	7020
ACTTCTACT ACACTTACAA TCGATTCTGT TTCAAAGGGA AGCTGCTGGG CAATTTCTTC	7080
TAATTTTTCA TTAGCTTGAT CCAGGGTTTG GTTACAAAAG GCAATGGACT CTTCCAAGCC	7140
CAACAGGGCA GGATAGGTTG ATTTTCTGTC CTGCAGATCC TTTTGAGGTG TCTTGCCGAT	7200
TTCTCAAAA CTAGCTGTCA CATCCAGTAC ATCATCTCTG ACTGAAAAG CAAGTCCAAT	7260
CAATTCACCC ACAGTTTCA GCTTCACCTG CATTTCAGGT GACAATTCAG CTATAATAGC	7320
TGCCGCTTGG AAGGATAGG CTAGTAACTT CCCAGTCTTA TTGGCATGAA TAGTCTGAAG	7380
TTCTTCAAAA GACAAGTGCT GGTGTTGCGC CTCCATATCC AAAACTTGCC CTGCTACCAT	7440
ACCCAGACTA CCTGAAGCAA GGGATAAGTT GGCAATCAAG TCCACCTTAA TCTGACTTGG	7500
CAAATCTGCC TGCCTAATCA AGGCATATGA GTCTAAGAAT AAGGCATCTC CAGCCAAAAT	7560

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GGCCATAGCT TCACCGAATT TCTTGTGATT GGTTAACCGC CCTCTTCGAT AATCGTCATC	7620
ATCCATAGCA GGAAGGTCAT CGTGAATCAA GCTCCCTGTA TGAATCATCT CTAAGGCAGT	7680
AGCTACCTGC GCGTGAGCAG GTTTGATGGT AACCTGCAAG GCTTCCAGAA CTCTAACAA	7740
GAGAAAAGGC CGAATACGCT TGCCACCAGC ATGAATAGAA TAGAGAACAG ACTCCCGTAA	7800
ACTAGAGGCA AACTGCTGGT CTCCATAAAA ATCTTCCAAA GCCGACTCGA CAAGAGCTAA	7860
TTTTTCTTGC TTTTTCATTC AAAATCACTT TCTGTTCCGT CTCTTGCAT GACCTTGACC	7920
AAGGTCTTTT CAGCCTTGT CAGCGTAGCT TGGAGCTCTT TTGACAAGAC CATGCCCTTT	7980
TGAAGGCAG TAATCGCATC TTCCAGAGCA ATTCACCAT TTTCCAACT TTGGACAATG	8040
GTTTCCAGTT CTGCTAGATT TTCTCAAAAT TTCTTTTGT TTGACATCTT TAACCTCTAA	8100
TTCTACTTGA CCATCTCGCA TCAAAAGCGT TACTTGGTCT TTTTCTTCA AACTCTCAAC	8160
CGAATCTACA ACGGACTCTT CTTTTTTGAC AATAGCATAA CCACGCGCCA CGATTCGGCT	8220
AGTATCCAAC ATGAGCAAAG CTCCGAAAG TCGCTTGGCC TCAGCAACCT TGGCGTCATA	8280
AACTAACGCC ATTTGGCTAC CTAAGAGCTT GTCCAACGT CCTAAACGGT CTGATAGCG	8340
TTGGATTTTG GTAACAGGTG ATAATTGTAC TAATTGATGA GTTCTTGCTT GAACTAATTG	8400
TTTGTATCA GAAATCCGAG TTCGAAACT TTGTTTCAA CGCAGTTGCA GTTGGTCCAA	8460
GCGTTGCAA TAACCGTCAT ACAAGCGCTC AGGTTGTCTA AAGATAACAG ACTGACTGCA	8520
TTTTTTCAA GCCTCTGTG TCTTAGATAG AACATTTCCG ACTGCCGTTA CCATCCGTTT	8580
TTCTGATTT TGCAAATGAG CTAATACATC CAACTTGGTC ACAGGTGTTG CCAGTTCAGC	8640
CGCCGCTGTT GCGTTCGAG CGCGTCGATC TGCCACAAAA TCTGCCAAGG TCACATCCGT	8700
CTCATGCCCC AACTAGAGA TAACTGGCAA ACGAGATTCA AAAATAGCTC GTACCACAAT	8760
TTCTTCGTTA AAGGCCGAGA GATCCTCAAT AGAACCACCT CCACGACCAA TAATGAGCAA	8820
ATCCAAATCG TCCCGTTGAT TAGCACGCGC AATATTCTA GCAATTTCTT CCGCAGCCCC	8880
TTACCTTGA ACCTTGGTCG GATAAAGAAG GATGTCAACA CCTGGGAATC GCCTGCTGAC	8940
GGTCGTGATA ATATCTCGAA TAACGGCTCC ACTACGGCTG GTTACTACAC CAATTCTCTT	9000
AGAAAATTGG GGCAGAGCTT GCTTGAAGCG TTCTTGAAAC AGGCCTTCTT CTGTCAATTT	9060
TTTCTTAAGT TGTTCAACT GAATCGCAAG CGCCCCAACC CCATCAGGCT CAGCTTTTTC	9120
AATGATGATG GAGTAGCTAC CACTTGGTTC ATAGACCTGT ACACGCCCAA TCACATTGAT	9180
CTTCATTCTT TCTTCCAGGT CAAACCCTAA TTTCTGATAA ATCCAGACC AGATGGTCGC	9240
TTGAATAACT GCATGGTCAT CCTTTAGGGA GAAATATTGG TGAGTAGGTC GTTTACGAAA	9300

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GTTGGAAACT TGACCAAGTTA AATAGACCCG TTCCAAGTAT GGGTCTTTAT CGAATTTTCAT	9360
TTTCAGATAC TTGGTCAAAG TTGTTACCGA TAAATACTTT TCCATCTCCA CCTACTATTC	9420
ATTTACTTGC TCITTCATGG GTATTATTAT ACCAAAAATA TGCCTAAAAA TCTCCATTTA	9480
TGTACCATTA TGAGGGAAAA ATAGAAAAAG GAGGCAAGGC CTCCACATGT GATTATTTGC	9540
TGTTTCGAGC TTCTTCCAAA ATCTTTGCAA TCTTGGTCGT CAACAGGTCG ATAGCCACGG	9600
TATTGCTAAC CCCTTCAGGA ATGACGATAT CAGCATAACG CTTAGTTGAC TCGATAAACT	9660
GGTGGTACAT TGGTTTGACC ACACCTAAGT ACTGGTTAAT AACGCTATCA AGGCTACGGC	9720
CACGCTCCTC CATATCACGC TTGATACGAC GAATAATGCG CACATCGTCA TCCGTATCCA	9780
CAAAAATCTT GATATCCATC AAATCGCGCA GACGCTTGTC CTCCAAGACC AAAATACCCCT	9840
CAACGATAAA GACATCTTGA GGTTCCTGAC GATAGGTCTT GCTACTCCGT GTATGCTCTG	9900
TATAGTCGTA GGTCCGGATG TCCACCGGAC GCCCTGCCAA CAATTCCTTA ATCTGCTCGA	9960
TCATCAAGTC TGTATCAAAG GCAAAGGAT GGTACATAGT GGTTTTGACG G	10011

(2) INFORMATION FOR SEQ ID NO: 77:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 5365 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 77:

CGTGTGGTCT TAAAAATAGA AGACAAAGAA CAAACTGTTG GAGGCTTTGT CCTTGCAGGC	60
TCAGCCCAAG AAAAAACCAA AACAGCTCAA GTTGTGGCTA CTGGACAAGG TGTTCTGTACC	120
TTGAACGGTG ACTTGGTTGC TCCAAGTGTT AAAACTGGAG ATCGTGTCTT AGTTGAAGCC	180
CACGCAGGTC TTGATGTCAA AGATGGCGAT GAAAAGTACA TCATCGTAGG CGACTAACAT	240
TTTGGCAATC ATTGAGGAAT AGAAGGAGAA AGTAAGTATG TCAAAAGAAA TTAAATTTTC	300
ATCAGATGCC CGTTCAGCCA TGGTTCGTGG TGTCGATATC CTTGCAGACA CTGTIAAAGT	360
AACCTTGGA CAAAAGGTC GCAATGTCGT TCTTGAAAAG TCATTGCGTT CACCCTTGAT	420
TACCAATGAC GGTGTGACCA TTGCCAAGA AATCGAATTG GAAGACCATT TTGAAAATAT	480
GGGTGCTAAG TTAGTATCAG AAGTAGCTTC TAAAACCAAT GATATCGCAG GTGACGGAAC	540
TACGACTGCA ACAGTCTTGA CCCAAGCTAT CGTCCGTGAA GGAATCAAAA ACGTCACAGC	600
AGGTGCAAAT CCAATCGGTA TTCGTCGTGG GATTGAAACA GCAGTTGCCG CAGCAGTTGA	660
AGCTTTGAAA AACAACGCCA TCCCTGTGTC CAATAAGAA GCTATCGCTC AAGTTGCAGC	720

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CGTATCTTCT	CGTCTGAAA	AAGTTGGTGA	GTACATCTCT	GAAGCAATGG	AAAAAGTTGG	780
CAAAGACGGT	GTCAATCACC	TCGAAGAGTC	ACGTGGTATG	GAAACAGAGC	TTGAAGTCGT	840
AGAAGGAATG	CAGTTTGACC	GTGGTTACCT	TTCACAGTAC	ATGGTGACAG	ATAGCGAAAA	900
AATGGTGGCT	GACCTTGAAA	ATCCGTACAT	TTTGATTACA	GACAAGAAAA	TTTCCAATAT	960
CCAAGAAATC	TTGCCACTTT	TGGAAAGCAT	TCTCCAAAGC	AATCGTCCAC	TCTTGATTAT	1020
TGCGGATGAT	GTGGATGGCG	AGGCTCTTCC	AACTCTTGTT	TTGAACAAGA	TTCGTGGAAC	1080
CTTCAACGTA	GTAGCAGTCA	AGGCACCTGG	TTTGGTGAC	CGTCGCAAAG	CCATGCTTGA	1140
AGATATCGCC	ATCTTAACAG	GCGGAACAGT	TATCACAGAA	GACCTTGGTC	TTGAGTTGAA	1200
AGATGCGACA	ATTGAAGCTC	TTGTCAGC	AGCGAGAGTG	ACCGTGGACA	AAGATAGCAC	1260
GGTTATTGTA	GAAGGTGCAG	GAAATCCTGA	AGCGATTCT	CACCGTGTG	CGGTTATCAA	1320
GTCTCAAATC	GAAACTACAA	CTTCTGAATT	TGACCGTGAA	AAATTGCAAG	AACGCTTGGC	1380
CAAATTGTCA	GGTGGTGTAG	CGGTTATTAA	GGTTGGAGCC	GCAACTGAAA	CTGAGTTGAA	1440
AGAAATGAAA	CTCCGCATTG	AAGATGCCCT	CAACGCTACT	CGTGACAGCTG	TTGAAGAAGG	1500
TATTGTTGCA	GGTGGTGGAA	CAGCTCTTGC	CAATGTGATT	CCAGCTGTG	CTACCTTGGA	1560
ATTGACAGGA	GATGAAGCAA	CAGGACGTAA	TATTGTTCTC	CGTGCTTTGG	AAGAACCCGT	1620
TCGTCAAATT	GCTCACAATG	CAGGATTTGA	AGGATCTATC	GTTATCGATC	GTTTGAAAAA	1680
TGCTGAGCTT	GGTATAGGAT	TTAACGCAGC	AACTGGCGAG	TGGGTAAACA	TGATTGATCA	1740
AGGTATCATT	GATCCAGTTA	AAGTGAGTCG	TTCAGCCCTA	CAAAATGCAG	CATCTGTAGC	1800
CAGCTTGATT	TTGACAACAG	AAGCAGTCGT	AGCCAATAAA	CCAGAACCAG	TAGCCCCAGC	1860
TCCAGCAATG	GATCCAAGCA	TGATGGGCGG	GATGATGTAA	GCTTTCTATA	GAAAACAAC	1920
TATAAAAAAC	ACAAAAGGAG	GGAATGACTA	ACCCTTCTTT	TTATAGGCTC	TTTGTCAACT	1980
GTAGTGGGTT	GAAGTCAGCT	AAGCTCGAGA	AAGGACAAAT	TTCGTCCTTT	CTTTTTTGAT	2040
GTTCAAAGCG	ATAAAAATCC	GTTTTTTGAA	GTTTTCAAAG	TTTCGAAAAC	CAAAGGCATT	2100
GCGCTTGATA	AGTTTGATGA	GATTATTGGT	CGCTTCCGGT	TTGGCGTTAG	AATAGTGTAG	2160
TTGAAGGGCG	TTGATAATCT	TTTCTTTATC	TTTGAGGAAG	GTTTTAAAGA	CAGTCTGAAA	2220
AATAGGATGA	ACTTGCTTAA	GATTGTCCTC	AATAAGTCCG	AAAAATTTCT	CCGGTTCCTT	2280
ATTCTGAAAG	TGAAACAGCA	AGAGTTGATA	GAGCTGATAG	TGATGTTTCA	AGTCTTGTGA	2340
ATAGCTCAA	AGCTTGTCTA	AAATCTCTTT	ATTGGTTAAA	TGCATACGAA	AAGTAGGACG	2400
ATAAAATCGC	TTATCACTCA	GTTTACGGCT	ATCCTGTTGT	ATGAGCTTCC	AGTAGCGCTT	2460

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GATAGCCTTG TATTCATGGG ATTTTCGATC CAATTGGTTC ATAAATTGAA CACGCACACG	2520
ACTCATAGCA CGGCTAAGAT GTTGTACAAT GTGAAAGCGA TCCAACACGA TTTTAGCATT	2580
CGGGAGTGAA ACAGTCTGGG AGACTGTTC AGCCTGAGCC TAGAAATTTG AAAGCGAAGC	2640
TGTTTAGCCA AGTCATAGTA AGGACTAAAC ATATCCATCG TAATGATTTT CACTTGACAA	2700
CGAACGGCTC TATCGTAGCG AAGAAAGTGA TTTCGGATGA CAGCTTGTGT TCTGCCCTCA	2760
AGAACAGTGA TAATATTAAG ATTATCAAAA TCTTGCGCAA TGAAACTCAT CTTTCCCTTA	2820
GTGAAGGCAT ACTCATCCCA AGACATAATC TTTGGAAGCC GAGAAAAATC ATGCTCAAAG	2880
TGAAAGTCAT TGAGCTTGCG AATGACAGTT GAAGTTGAAA TGGCCAGCTG ATGGGCAATA	2940
TCAGTCATAG AAATTTTTTC AATTAACTTT TGAGCAATCT TTTGGTTGAT GATACGAGGG	3000
ATTTGGTGAT TTTTCTTTAC CAGGGGAGTC TCAGCAACCA TCATTTTGA ACAGTGATAG	3060
CACTTGAAC GACGCTTTCT AAGGAGAATT CTAGAAGGCA TACCAGTCGT TTCAAGATAA	3120
GGAATTTTAG AAGGTTTTTG AAAGTCATAT TTCTTCAATT GGTTCGCGCA CTCAGGGCAA	3180
GATGGGGCGT CGTAGTCCAG TTTGGCGATG ATTTCCCTGT GTGTATCCTT ATTGATGATG	3240
TCTAAAATCT GGATATTAGG GTCTTTAATA TCGAGCAGTT TTGTGATAAA ATGTAATTGT	3300
TCCATATGAA TCTTTCTAAT GAGTTGTTTT GTCGCTTTTC ATTATAGGTC ATATGGGACT	3360
TTTTTTCTAC AACAAAATAG GCTCCATAAT ATCTATAAGG GATTTACCCA CTACAAATAT	3420
TATAGAGCCG AAAATTCACA TCTAATATAT GCAGACTACT TTGAAATGAA ATTAACAAAA	3480
TTATTAAAGG ATGACACAAA AGTTTTTGAA AAATCTACAT TCAAATTTGT AGAAGGATAT	3540
AAAATATACC TGACAGAATC TAAAGAATCT GGAATTAAAC AAATGGACAA TGTCATAAAA	3600
TATTTTGAGT TTATTGAATC TAAAAGTATT GCTTTATATT TTCAAAAACG ATTAATGAG	3660
CTGATAGATT AAATAGCATT TTCTCTGTTG AGATATTGTT TTTAAAAATAT TGTAATAAAT	3720
GATTGATGCT ATGTGGAAAT ACAAAAAAAT GTTTTTGATA CGAAGTTGAC CTGTATTTTT	3780
TATACTAATC ATTTTCGTAT TTTTGTATT AAACGATATA AGTTTGTGTG AAACCTTACAA	3840
GGAATAAAGA CATTAACAAA TAACAGTATA TCTATTTGTT TTATATATTT TACGAATTCT	3900
GCATAAATCT CTTTCTAGTA ATGTGTTGTA ACTCTGCTAT AATAGATTTA TTCCTTTTTG	3960
TGTTTACACA ATTTATTTTA TAGTACCAA AAAGGTCAGG ATTTTGTTC TGACCTTTGA	4020
CAACTTTACC GATTCTTTAG TTCTACATAG CGCTTGATAC AAATGTTTAC ATAGGCTTCT	4080
GAGAAAGGAC CACGTCCATT GTTAATCCAA TCAACAAGAA TTTTGACATG TTCTTTTAAA	4140
ATATAGTCCA AGTCATCAGA ATAATTCATT TTGCGTTTGT GACGCTCGTA CTCTTCAACC	4200
TCCAAGAGAC GTTTTCCCC ATCTGTAAAA ATTTTAACAT CCAATCGTA ATCAATATAC	4260

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TTCAGTGCTT	CTTCATCCAG	ATAGTAGGGG	CTAGCCATAT	TGCAATAGTA	AGAAGTCCA	4320
TTATCACGAA	TCATGGCAAT	GATATTAAAC	CAATATTTCT	TGTGAAAGTA	AACAATAGCC	4380
GGTTCTCGAG	TGACCCAACG	ACGACCATCA	CTTTCGGTAA	CAAGTGATG	ATCGTTGACA	4440
CCAATAATGG	CGTTTTCTGT	TGTTTTTAGT	ACCATGGTGT	CCCGCCAAGT	TCGGTGGAGA	4500
CTCCCATCAT	GCTTATAACT	TTGAATTGTA	ATAAAGTCGC	CTTCTTTTGG	AAGCTTCATA	4560
ACTAACCAAC	TTTCTACAAT	TTATAAGTTT	ATCATTTACT	ATTGTACCAT	AAAATTACCC	4620
AAAACTCTGTG	AATTTCACTT	GGAAATATTA	AAGATATTCT	CTAAGAGCGC	TTGCTATATC	4680
CGAAAAATCG	TAGCCCTTTC	GTGCTAAAC	TTGAGTTAAA	CGCTGCTTCA	GTTCGTATCC	4740
TTCATACTTT	CGGGCATACT	TAGTATATTG	CTTATCAAGT	TCCTTGAAGA	TGAGTTCCTG	4800
AGTCGTTTCT	TCATCAACTT	GACTATCCAA	TTCGTCAAAG	GCAATTTTAG	CATCAAAATA	4860
AGAGAAGCCC	TTGTTAGTCA	AGTTCTGGAT	AATCTTATCT	TGCAGGGCAC	GAGCTGGAAG	4920
TTTTCCCTCA	TATTTTTC	ATAGTTTAT	GGCTACACGT	TGAGCAACTT	CCGAAAAATC	4980
AAAATCATTC	AAGATTCTT	CTATAGTAGA	TTTGGAAATT	CCTTTTGTG	CTAATTCTG	5040
AGTCAGTACA	TAAGGTCCCT	TGTCTCCTGA	AAGTTGATTG	GCATTGATGA	TAGCATAAGC	5100
GTA CTGGCTA	TCATTAATCC	ACTTCTCTTC	TTTAAGATTA	GCAATGACTT	GAGAAACGAT	5160
GTTTTCATIA	ATATCATATT	TTTTCAGATA	TTCTCTGACC	TCTTTTTCAG	TACGTGCTTT	5220
AAAGGATAAG	TGGTAGAGGG	CCAGATTCTT	ACCATAAGAA	AATTGAGCAA	AGTCTTGAAT	5280
CTCTTTCAAT	TCCTCTTCGC	TTATCACCTT	ATCTCTCGAT	AACATAAAAC	GAACAATTGT	5340
GTCTTCGGTG	ATATAGCATT	TGTCG				5365

(2) INFORMATION FOR SEQ ID NO: 78:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 3636 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 78:

TTTCCAGAAA	GAAGTTGAGT	AAAGTCTTTA	TCAAAGAGAA	TGACTTCCGT	ATTGGAAGT	60
ACATTAGGTT	TTATTTCTAC	TTTACTAGCG	TCCGCCCTAG	CATTTTCTAA	ATCTTTAATC	120
TCTTCTGTTG	CCCTATTTAT	AGCCAGCTGA	ATACTGCTT	GAGGATTTTC	ACTCAGTCCA	180
TGAAGCTTAT	CGTCCACCGA	AGTATAAAGA	CTCGAATGCA	TGACTTGTA	AATAATCAGA	240

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GTCATTGTAG	AAAAAATCAG	GGTGAAGACA	CCGAAGTTGC	GGATAAAATA	ACTAAAGTCA	300
TCCGCATACC	ATGTTTTTTT	AAGTTTACTG	AACATCTTTT	AAAAGATACC	CAACACTACG	360
CAAAGTTTGC	AAATTCTCTG	CAAAAGTGGT	TCCCTTTAAT	TTCTTACGGA	CTTTTGAAAC	420
ATAGACTTCG	ACAACCGAAA	TCGTTGTATC	ACTATCAAAT	CCCCATAGAC	GGTCAAAAAT	480
CTGCGTCTTA	GGCAAAATCA	CATTTTGATT	TTGAAGGAAA	TAAACTAGTA	AATCGAACTC	540
TTTCCCCAGC	AATTCGACAG	GAGTATCTTC	AACTTTAACG	GTATTGGTTG	ATAAATTAAC	600
CACGATATTC	CCATAAGTCA	AGGTGTTTTT	ATTAAACTTC	CCTGAACGTT	TGAGAAGGGC	660
CTGAATCCGC	ATTTTAAGTT	CTTCTAGGTA	GAAAGGTTTG	GTCAGATAAT	CATCCGCTCC	720
CAGTTCAAAT	CCATGTCCCT	TGTCATCCAA	ACTTTCCTTG	GCAGTCATAA	TCAGAACTGG	780
TGTCGTAATT	CCCTTTTTCAC	GCAATTCTTT	TAAGACTTGG	AAACCATTTT	TTTCTGGCAA	840
CATCAAATCC	AGCAAAATCA	AGTCATAGAC	ACCACTCTCA	GCTTCGTAGA	GACCTTCTTC	900
TCCATCAAAT	ACCTGCATAA	CATCCGCAAA	ATCGTCTAAA	AAGTCAAATA	CTGAATTTGA	960
CAGACCTAGG	TCATCCTCAA	CCAATAAGAT	TTTTATCATG	AGAAACTCCT	CCTTATTAAA	1020
ACTATTATAC	CAAATTTGCC	TTAAAAAAA	CTCAACTCTC	TGCATTTTAC	ATGAGATAGC	1080
TGAGTTTCT	TTTTATTTTA	GGCTTATTTA	TGCATTTCCG	TATTGAAGAA	CAACTGCTTC	1140
GACTGCAGCT	TTTTACGGC	TAATCAAGTC	AACACGCGCT	GCAATTCCT	TGATTCCCAT	1200
ACCGATGTTA	CGGCTAAGAG	CAAGGTCAGA	AAGTTGCCGT	TCAAAGAACT	CCTTGATTC	1260
CGCCAAGCGT	TGCTGAGTCT	TAAATACATG	AGCAGGAAGG	ATAACAAAGC	TATCAAAGCT	1320
CATATCTCCT	CCAAGGGCTG	CCTTAATCCA	AGCCCACTTT	TCACGCGCCC	AAGACCAAGC	1380
TGTTTTCTGA	GTTGCTTGAT	GAGCTAGGAA	TTGGTAATAC	CAAGCAGACA	AGTCCTGTGG	1440
TTTGACCACA	AATTTGTCCT	TCCAAGAAGT	AATCAGGTTT	TGGATATTAT	CCGCATCTGT	1500
ACTGTATGCA	AGAGCTGCTG	CCAACTGGCG	TTTAAAGACA	GCATCTGTTG	CGTGAGTATA	1560
AGTATCAAGA	TAAAGTGCTA	ACAAGTCTTT	AGTCTCATGA	TGTTTCATCT	CATTAATCAG	1620
AACTTGTGAG	CGAATAGCTG	CTGGGAGTCC	TGCAAGATTC	TCCTTGTTGT	TTGCGAAGAT	1680
TTGGCTAGCG	ACTTGACTAG	CTTCTGCATC	ATTTGAGCGA	ATCATCATCG	AAACAGCCAG	1740
CTGACGAACC	AATTCATCCT	CATCTGATTC	TCCGTCTTTA	GCTTCAAAAC	CAAGACGGTC	1800
ATAGTTATGA	CGAGCCAATT	TAGCAACCAG	TCCTTTGAAG	GCTGTTTCAG	CATCCGTTCC	1860
TTCATCAATA	AAGCGCTCAA	GGGCTGAAAT	CACCTGAGAA	ACAGCTGAAA	CCACCAGATA	1920
AGACTCTTCC	TTAGCAAGTT	TATCAAGAAC	TGGAAGCAAG	TCTGCAATAAG	AAATGTGCCC	1980
TGCCTCAGCC	AACAAACGAC	GTTCTTGAAC	AATTTGCAGT	TTGCTTGTGT	TATCAAGTGT	2040

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CTCTAGCTCA	GCAAGAACAG	CTGCTAACAA	GTCTCCTTGA	TAGTCGGTAA	TATAGTGGGC	2100
AGTATTTTCA	GTGTTGAGAC	GAAGAGCTCC	TTCATTTTCA	GCAAGAAGAC	CTGCCGTAGCC	2160
AGGGATTTTCG	ATACTTTCAG	TTTCGAGTGT	ATCAGGCAAG	CCTTTCCAGT	TGCTATTGAG	2220
GGGCACCACC	CAGAGACGGT	TCTTGTCTTC	GTTCTCACCG	ATGAAGAATT	GTTTTTGTGA	2280
AATCTTCAAG	ACATCATTTT	CAACTTTAAC	AGTAAGAACT	GGGTAACCAG	GCTGTTCCAA	2340
CCAAGAATCC	ATGAAGGCTG	CGACATCACG	TCCTGACGCT	TGACCAAGGG	CATCCCAAAG	2400
GTCCTACCA	ATGGTGTTC	TGTATTGGTG	TTTTTCAAAG	TAGGCGTGCA	AACCTTTAGC	2460
AAAATCAGCA	TCTCCTAGCC	AACGGCGAAG	CATGTGCATG	AGACGGCTTC	CTTTGGCATA	2520
GACGATAGCG	CCGTCAAAGA	GTGTATTGAT	TTCATCTGGA	TGTTTAACTT	CGACGTGGAC	2580
AGACTGAACG	CCATCAGTAG	CGTCACGTTT	AAGAGCAAGA	GGTACTCCAC	CTGTTTGGAA	2640
ATCTTCAAAG	ATATTCCAGC	TTGGTTCGAT	GGTATCCACA	CAGACGTATT	CCATCATATT	2700
AGCGAAACTT	TCATTGAGCC	AAAGGTCATC	CCACCATTTT	ATAGTCACGA	GGTTCCCAA	2760
CCATTGGTGA	GCCAATTTCAT	GGGCCACAAC	AAGGGCAACT	TGTTGACGGC	TAGCAAATGT	2820
AGAGTTCTCA	TCGACAACCA	AGTAACTTC	ACGGTAGGTC	ACAAGACCCC	AGTTTTCCAT	2880
AGCACCAGCT	GAGAAGTCAG	GAAGGGCGAT	GTGGAGAGAT	TGAGGAATTG	GGTACTTAAC	2940
TCCATAGTAA	TCTTCGTAAA	ACTCGATAGA	GCGAACAGCG	ATATCCAGTG	AGAAATCAAG	3000
ATTTGAAAGT	GGATGTGCTT	TGGTTGAGTA	GACACCTACC	AGGGTACCAT	TTTTAGTTTT	3060
AGCGGTCAAC	CCTTGCAAAT	CACCAGCAAC	AAAGGCCAAC	AAGTAAGAAG	ACATGCGAGG	3120
TGTTGTCTCA	AACTTCCAGA	TACCTGTTTC	CTTACGGTTT	TCAACATCGA	TTTCTGGCAT	3180
GTTTGACAAG	GCCAATTTCAC	CTTCTGCTTG	GTCAAAGCGA	AGAGAGAGGT	CAAAAGTTGC	3240
TTTGGCTTCA	GGCTCATCCA	CACATGGGAA	AGCTTCGCGC	GCAAAATGGC	TCTCGAACTG	3300
AGTAGACAAG	ACCTCCTTCT	TGACTCCATC	AACTGTATAA	TAAGAAGGGT	AAATCCCTGT	3360
CATGTTGTCT	GTAATTTTAC	CAGAAAAGGC	AAGAACCAAT	TCAACTTGAC	CAGCCTCAGC	3420
CAATTCGATA	TGAAGGGCTT	CATTGTCATG	GTCAACTGTA	AATGGACGAG	CTTGACCTGC	3480
AACTTCTACA	GAGGTGATTT	CCAAATCTTT	TTGGTGGAGG	GAGATGCGGT	CACTCTGTGC	3540
TTGACCAGTG	ATGGTCACTT	TCCCAGAAAA	AGTCTTGGTC	TCACGACTCA	AATCTAAAAA	3600
TAAATCATAA	TGTTCAGGAA	CAAATTGCTT	AATGGG			3636

(2) INFORMATION FOR SEQ ID NO: 79:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 5066 base pairs

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(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 79:

ATAGCGTGTA ATAATCGATT TTAGAGGTAC CATAAGCCAC CTCCTACAAA TAGAAACCGA	60
TATAAATCAA TGCCTTCCAC CCTTAGACTT CCCTAGTTCC TGTCTCAAGC GAAACATTTT	120
TTTGAAACAG GAATAAGTTA ACCAATTCAT ACCAATAGCT AGCAGAATAA AAAGAAACCA	180
AATGCCCCAT AACTTGATAT CTGTCACATT TCTCAAGACG GTATTGAAAA ACAGAACTGA	240
AACAACGTGC CAAGCAAGGC TAAAAAGAGA ATAGAAGGGG ATGTAAAACC AGTAAAAATA	300
ATAAAAAATT GGAAAAAACT TACTATTTCT GTTGGCCTTT TCAATCCAGT TATCAAATA	360
AAAGTACGGT GCTAAAAGTA AGAATTTAAA CAAATGTTCC ATCACCGACA TCCCCCTTC	420
TTTTGATAGC GTTTTCTATT ATTTTATTAT ATCAAAAAAA TCCGGAACGT TCATTCCAGA	480
TTCTACTTTT TTATTTGCGT TTTCTTGCGA TGAGATGAAT CGGTGTTCCC TCAAAAACAA	540
AGGCCTTGCG GATTTGATTT TCCAAGAAAC GCAGTAAGA AAAGTGCATG AGTCTTCTT	600
CATTGACAAA GATGACAAAG GTTGGTGGTT TGGTTGCCAC TTGGGTCGCA TAGAAAACT	660
TGAGACGTTT TCCTTTGTCT GTCGGTGTTG GGTGATGGC AATGGCATCC ATGATGACAT	720
CGTTCAAGAC AGCTGATGGA ATACGTGTAT TTTGACTTTC GCTGATTTGC TTAATCATCT	780
CAGGAAGTTT GTGGAGACGT TGCTTGTTA AAGCTGATAC AAAGATAATC GGTGCGTAAG	840
GCAGGTATTG GAACTGCTCA CGGATATCTT CTTCCAGTT TTTCATAGTG TGTTATCTT	900
TTTCAAGCGT ATCCCCTTG TTGACCACGA TAATCATCCC TTTACCAGCT TCATGGGCAA	960
ATCCTGCGAT ACGCTTGTCG TACTCACGAA TGCCTTCTTC CGCATTGATG ACCATCAAGA	1020
CCACATCTGA ACGGTCAATA GCACGCATGG CACGCATAAC AGAGTATTTT TCAGTATTTT	1080
CATAAACCTT ACCAGACTTA CGCATAACAG CCGTATCAAT CATGGTAAAC TCTTGACCAT	1140
CTGTATCTGT AAAGTGGGTA TCAATGGCAT CACGAGTTGT TCCAGCAACA GGAAGTAA	1200
TAACACGGTC TTCTCCCAAG ATAGCATTGA TCAAGCTTGA TTTTCCAACG TTAGGACGAC	1260
CAATCAAGCT AAACCTTAATG ACATCTGGAT TTTCTTCCTC ATATTCATTT GGAAGATTTT	1320
CTACGATCGC ATCTAGCACA TCCCCTGTAC CGATTCCATG GACAGATGAG ATAGGCAATG	1380
GTTCACCCAA ACCGAGAGCA TAGAAATCAT ATATATCATT TCTCATCTCA GGGTTGTCCA	1440
CCTTGTGAC TCGGAGGATA ACTGGTTTGT GGGTCTTATA AAGCTTACGA GCTACGTATT	1500
CGTCTGCATC AGTAATTCCT TCCTTACCAG ACACGACAAA AACGATAACA TCTGCTTCTT	1560

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CCATGGCAAT TTCTGCCTGG TGCTTGATTG GTTCCATGAA AGGAGCATCG ACATCATCAA	1620
TTCCCTCCTGT ATCAATCATG CTAAAAGAAC GATTGAGCCA CTCACCCGTT GCATAAATAC	1680
GGTCACGTGT CACTCCTTCG ACATCTTCTA CAATGGAGAT TCGCTCACCA GCGATCCGAT	1740
TAAATAGGGT TGATTTCCCA ACATTGGGAC GTCCTACAAT GGCAATAGTT GGTAGGGCCA	1800
TAATTTCTCA CTTTCTACAA TAATTTCTTC TGTTCAAGAT TTTTCTAGT TGAGCTTGGT	1860
TCAGCTTGAC CAAACTGTTT TGCTAGGCGC TGAATCCAGC TTGTGGTCGC ACGCGCCCCA	1920
GCATAGTCAG CCTGAACACG GTCATAAGCT TGGATTGCCT CAGTTGACTG TTCTTGGTAT	1980
TCTTCCTCAA AGACAACATT CTCTAGTGGC AGTCTCGGTT TCATATCATG ATGTTGATT	2040
GGCACACCCA GTGCCATCCC AAAGACAGAA TAGGTGTAGT CAGGTAGGTT AAAGAGCTCT	2100
GCCACTTCTT CAGACTTGTA TCGAACCAAA CCGATAATCA CACCACCATA GCCCAAGCTT	2160
TCAGCTGCCA ACAAGGCGTT TTGTCCAGCA AGAGCTGCAT CGACCGAACT AATCAAGAGA	2220
CCTTCCACAC CTGGGGTTG GAAGGTGTCG GTATGAAGTC GGGCTCCCTT TTCTGCTCGG	2280
TTCAATCTC CGACAAAGAG AAGGAAAACA GCAGACTGGC GAATGGCTTC TTGAGGTACC	2340
AATTCATACA AGGCATCTTT CTCTCTTGA CTTCGTACCA CAATCACAGA GTAGGATTGG	2400
AAATCTTCC AAGATGATGC CATCTGGGCT GCTGTCAAAA TCTCATTTAA GTCTACTTGG	2460
GGAAATTCTT GCTCTTTAAA CCTGCGCACT GAAGTATGAG CCTTCATCAA TTTAATGGTT	2520
TCGTGCATCG ACGGTTTACT CCTTCTAAAC GAGTCTCCTC AGCCAAATAA CGGATGCGTT	2580
CCATGACCCG TCTGGCTTCC CAGGTTTCGT CATTTCCATG TTTCACCTTC GCAAAATGCT	2640
TCTCCAAATC TTCAAAGTTG AAGTTGGATG TGAAAAAGGT CGGTAAATTT TCCTGCATCC	2700
GATATTGGAG AATGACCTGC AGGATTTTCT CACGCACCCA AACGGTTGAT TGCTCGGCGC	2760
CAATATCATC TAAAATCAGG ACCTCAGACA GCTTAATCTC ATCCACCAAG GTCTTAACAT	2820
TGCCATCACT GATAGCATTT TTGACATCAA TGACAAAGCT AGGATAGTGG AGGAGAGTTG	2880
ATGAAACACC ACGTTTTTCT GATAAATCAT GAGCTAAGGC CGCCACCATG AACTTTTAC	2940
CCACACCAAA GTCTCCATAT AAGTAAAGAC CTTTTCGAAT AGCTGGATAT TGCTCCACGA	3000
AGGCTAGTAG CTTTTCAAAA ACTGGTAAGC GCCCCAAATC ATCCAAGTCA ACTTGAGCCA	3060
AACTAGCTTT CTGAGACTG GCTGGTAGAT TGATTAACCT GAGACGGTTC TTAATAGCCG	3120
CTTCTTTTTC AGCCGCGATT AGCTCAGGAG TTTCTTCATA TGAAACATCT GCATAACCAT	3180
GATTCTTAAC CAAAATCGGC TTGTAGCCTT TGGCAATATA ATCCGTATCC CCACGGAGAA	3240
ACTTGTCACG CTCGGTGATG TACTGATTAA ACTTGGAGAT ACTGCGATTT AATTCCTTTG	3300

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GAGTTAAGGA TTCTTGCTGG ATAAAGGCCG CAACATCAGG GTCCTTCATG ATTTTCTGGA	3360
CCAAATCTTG ATAATAAAAA CGGCTGGGTT GACGTTTGAG TACGTCTCCG ACACTTTCCA	3420
TCTAATCTCC TCCTTTTCT AATCGAGCTA ATAGTTCTTG CTTCTTACGT TCTAGTTCCA	3480
GACGAGTTTC CTCGCTGGTT TCATTCTTAT ATTCAGGATT ACTCCATTTA GGAACATTGG	3540
TTTTTCTGG GGCAGTCTGA TTCTGTTTTT CTGTTTTTGC TTTCTGCCCT CGATCACGAA	3600
TCGTAAAAAC GGCCTCTTCT GCCGAATGAA TCTTTTGATA GGCATAGTCA TTGGCTACCT	3660
TCATGGCATA TTCTTCATTG ATATTTGCCG AATCCACCTT ATTAAAGGTC AATAAGAGAA	3720
TAATATTGAT GACTTCGTCC AGTAAGCCCA AGCCAGCCAT CTGTTGCAAG AGTCTCTTT	3780
CTGTTGGGT AATGTTCCC TTGCGTGTTC GCTTGATTTC TGCTAAGAAC TGCAGGGCAG	3840
TTTACTTTT AGCTTCTTTG ATAATGGTCG CTTCTTAAG ACTAAAGTCA GAGGAACTG	3900
GTTTTGAGC AATTTTTTCA CGCATGCGTT TGGTTGAAAT AACCTGGGAA ACAGCTGTTC	3960
ACTTGGCCAA TTGATAGGTT TCAAACCAAG TCCATTCTT CTCCTCGGCA ATAGCAAAGA	4020
GGTTAAGAC ATCGACTGC TCATCCGCAA AACGAAGTCC ATCTCGAGCC ATCAGCTGGC	4080
GAAATGTTT CAAGTCAAAA TCATTGGCCA CTTTCTTCTT GAGACCAAGG TCTTCTTGAC	4140
TGCTAGTTC TGCCAATTCT GGAAAGACTT GATTGAGTGA GACAGGTATT TCTTCACCAT	4200
CAGCACTTTC AACTTTCAAA TCCTCCACAG CTACATCGCC AATCTTTTTC TCTAAGAGTC	4260
TGCGATAAAC AGGATGCCCC AAGAAGTCTT GACTAGATAG AGGAGCATGG AGGGCTAGCT	4320
GATAAACATC ACCCTTTTGA TAGAGGGTCA AGAGATTAAA AGCAGATAAG ATTTTCAATG	4380
ATTTTATCAG TCTATCCATC CCAAAGTTGA GATGGTTGAG AATGCTTGAA AAAAGATATT	4440
CCTTTCTACC ATTATCCCAA AAAGTATTG TATAAAGATA AAGGCTCAGT GCCTCCTGAC	4500
CGATAATCGG GAGGTAGCAC TGTACCAGAG ATGAGGTATC TTGCGACACC CGATTATTCT	4560
TTAGATAAGA AAAACGGTCA ATTGGCTTCA TTTATCTTTC CTTTTCTTTT TTAGAGGACT	4620
GGGTGATTG TTGGAGCAAG CTCTCTAACT CACTGACATC CTTAAACTA CGATAGACAC	4680
TAGCAAAACG TACATAGGTA ATCTCGTCCA ATTCAGCCAA CTCCTCCATG ACGAGTGAAC	4740
CAATGTCCTC ACTTTGAATT TCATTTTCAT TTCGACCACG GAGTTTCTGT TCGATACGAT	4800
TGACTACCAT GTTGATTTC TCACTTGACA CAGGACGTTT CTGGGCTGAG CGGATAATCC	4860
CATTAAAGAT TTTATCTCTG GAGAATTGTT CCCGTGTGCC ATCTTTTTTA ACAACCACTA	4920
AGGTTCTTTC TTCTACTCGT TCGTAGGTTG TAAAACGGTG TTGGCATTCTG TCGCACTCAC	4980
GTCTTCTACG AATGGTGTTT CCTTCTCTG CTGGCGACT ATCGATAACA CTTGACTTGG	5040
TAGCCCCACA TTTTGGACAG GGTACC	5066

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(2) INFORMATION FOR SEQ ID NO: 80:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 9607 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 80:

CACCTGAAGT ATTTGAAACA GCTATGGAAA ACATCATGCC TGTACTTGAA GTACGTGCAC	60
GTCTGTCTGG TGGTTCTAAC TACCAAGTCC CAGTTGAAGT TCGTCCAGAA CGTCGTACAA	120
CACTTGGACT TCGTTGGTTG GTAACAATCG CTCGTCTTCG TGGTGAACAC ACAATGCAAG	180
ACCGTCTTGC AAAAGAAATC TTGGATGCTG CTAACAACAC TGGTGCAGCA GTTAAGAAAC	240
GTGAAGATAC TCACCGTATG GCTGAAGCTA ACCCTGCATT CGCACACTTC CGTTGGTAAG	300
ATAGGATGCG AAAGCGTTAA GAAAGTCCCA GAGAAAATAG GGAATCGAAG CAGGTTGCGG	360
TTGCAACCAA TGAGATTCAT CTTTTTCTCC AGACTTTTAG CTTGAGCTCA ACTAAATCAT	420
GATGCTAGGA ACGGTAAGGA TGCAAGGTAA AAATAGGAAA CTGACGCAGT ATTCGACGAA	480
TACAAGGAGT TTTATCTTTT TCACGCAGCA TCCCGTTCCA GCTCACATCG GCTAACTAAC	540
TTTAGCCCGG GTTCAAATTA GCTAAATCGA TTAGTATTAG CTATAACTCA GCTTACCATC	600
TCGTAAGTTG AAACCAACAA TAGCATGAAA ACATTGAGAA CGGGTAGGTC CTGCCTATCC	660
GTTTTTATTA AAATCGTGTT ATAATAGAAT AGAAATCAAA AATAAATAGG AGAAACAAAC	720
CTCATGGCAC GCGAATTTTC ACTTGAAAAA ACTCGTAATA TCGGTATCAT GGCTCACGTC	780
GATGCCCGTA AAACAACAAC TACTGAGCGT ATTCTTTACT ACACTGGTAA AATCCACAAA	840
ATCGGTGAAA CTCACGAAGG TGCCTCACAA ATGGACTGGA TGGAGCAAGA GCAAGAACGT	900
GGTATCACGA TCACATCTGC TGCACGACA GCTCAATGGA ACAACCACCG CGTAAACATC	960
ATCGACACAC CAGGACACGT GGACTTCACA ATCGAAGTAC AACGTTCTCT TCGTGTATTG	1020
GATGGTGCGG TTACCGTTCT TGA CTCACAA TCAGGTGTTG AGCCTCAAAC TGAAACAGTT	1080
TGGCGTCAAG CAACTGAGTA CGGAGTTCCA CGTATCGTAT TTGCCAACAA AATGGACAAA	1140
ATCGGTGCTG ACTTCCTTTA CTCTGTAAGC ACACTTCACG ATCGTCTTCA AGCAAATGCA	1200
CACCCAATCC AATTGCCAAT CGGTTCTGAA GATGACTTCC GTGGTATCAT TGA CTTGATC	1260
AAGATGAAAG CTGAAATCTA TACTAACGAC CTTGGTACGG ATATCCTTGA AGAAGACATC	1320
CCAGCTGAAT ACCTTGACCA AGCTCAAGAA TACCGTGAAA AATTGATTGA AGCAGTTGCT	1380

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GAAACTGACG AAGAATTGAT GATGAAATAC CTCGAAGGTG AAGAAATCAC TAACGAAGAA	1440
TTGAAAGCTG GTATCCGTAA AGCGACTATC AACGTTGAAT TCTTCCCAGT ATTGTGTGGT	1500
TCAGCCTTCA AAAACAAAGG TGTTC AATTG ATGCTTGATG CGGTTATCGA CTACCTTCCA	1560
AGCCCACTTG ACATCCCAGC AATCAAAGGT ATTAACCCAG ATACAGACGC TGAAGAAATT	1620
CGTCCAGCAT CTGACGAAGA GCCATTTGCA GCTCTTGCCT TCAAGATCAT GACTGACCCA	1680
TTCGTAGGTC GTTTGACATT CTTCCGTGTT TACTCAGGTG TTCTTCAATC AGGTTTCATAC	1740
GTATTGAATA CTTCTAAAGG TAAACGTGAA CGTATCGGAC GTATCCTTCA AATGCACGCT	1800
AACAGCCGTC AAGAAATCGA CACTGTTTAC TCAGGTGATA TCGCTGCTGC CGTTGGTTTG	1860
AAAGATACTA CAACTGGTGA CTCATTGACA GATGAAAAAG CTAAATCAT CCTTGAGTCA	1920
ATCAACGTC CAGAACCAGT TATCCAATTG ATGGTTGAGC CAAAATCTAA AGCTGACCAA	1980
GACAAGATGG GTATCGCCCT TCAAAAATTG GCTGAAGAAG ATCCAACATT CCGCGTTGAA	2040
ACAAACGTTG AAACGTGTA AACAGTTATC TCAGGTATGG GTGAACTTCA CCTTGACGTC	2100
CTTGTTGATC GTATGCGTCG TGAGTTCAAA GTTGAAGCGA ACGTAGGTGC TCCTCAAGTA	2160
TCTTACCGTG AAACATTCCG CGCTTCTACT CAAGCACGTG GATTCTTCAA ACGTCAGTCT	2220
GGTGGTAAAG GTCAATTCGG TGATGTATGG ATTGAATTTA CTCCAAACGA AGAAGGTAAA	2280
GGATTGCAAT TCGAAAACGC AATCGTCGGT GGTGTGGTTC CTCGTGAATT TATCCCAGCG	2340
GTGAAAAAG GTTTGGTAGA ATCTATGGCT AACGGTGTTC TTGCAGGTTA CCCAATGGTT	2400
GACGTAAAG CTAAGCTTTA TGATGGTTCA TATCACGATG TCGACTCATC TGAAACTGCC	2460
TTCAAGATTG CGGCTTCACT TTCCCTTAAA GAAGCTGCTA AATCAGCACA ACCAGCTATC	2520
CTTGAACCAA TGATGCTTGT AACAACTACT GTTCCAGAAG AAAACCTTGG TGATGTTATG	2580
GGTCACGTAA CTGCTCGTCG TGGACGTGTA GATGGTATGG AAGCACACGG TAACAGCCAA	2640
ATCGTTCGTG CTTACGTTCC ACTTGCTGAA ATGTTTCGGT ACGCAACAGT TCTTCGTTC	2700
GCATCTCAAG GACGTGGTAC ATTCATGATG GTATTTGACC ACTACGAAGA TGTACCTAAG	2760
TCAGTACAAG AAGAAATTAT TAAGAAAAAT AAAGGTGAAG ACTAATCCGT CCTCACTCTA	2820
GAAGGAAGTC ACTTAGTGGC TTCCTTTTGT CTTTAGAAAA TACCTCTAAA TATGTTAAAA	2880
TAGTAGAAGA ATAATGTGAG GAAAAATGAAT GTCAAATAGT TTTGAAATTT TGATGAATCA	2940
ATTGGGGATG CCTGCTGAAA TGAGACAGGC TCCTGCTTTA GCACAGGCCA ATATTGAGCG	3000
AGTTGTGGTT CATAAAATTA GTAAGGTATG GGAGTTTCAT TTCGTATTTT CTAATATTTT	3060
ACCGATTGAA ATCTTTTGTAG AATTAAAGAA AGGTTTGAGC GAAGAATTTT CTAAGACAGG	3120
CAATAAAGCT GTTTTGTAAA TTAAGGCTCG GTCTCAAGAA TTTTCAAATC AGCTCTTGCA	3180

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GTCCTACTAT AGGGAGGCTT TCTCTGAAGG TCCATGTGCT AGTCAAGGTT TTAAGTCCCT	3240
TTATCAAAAT TTGCAAGTTC GTGCTGAGGG TAATCAGCTA TTTATTGAAG GATCTGAAGC	3300
GATTGATAAG GAACATTTTA AGAAGAATCA TCTTCCTAAT TTAGCCAAAC AACTTGAAAA	3360
GTTTGGTTT CCAACTTTTA ACTGTCAAGT CGAGAAGAAT GATGTCCTGA CCCAAGAGCA	3420
GGAAGAGGCC TTTTCATGCTG AAAATGAGCA GATTGTTCAA GCTGCCAATG AGGAAGCGCT	3480
CCGTGCTATG GAACAACTGG AGCAGATGGC ACCTCCTCCA GCGGAAGAGA AACCAGCCTT	3540
TGATTTTCAA GCGAAAAAAG CTGCAGCTAA ACCCAAGCTG GATAAGGCGG AGATTACTCC	3600
TATGATCGAA GTGACGACAG AGGAAAATCG TCTGGTATTT GAAGGGGTG TTTTGTGATG	3660
GGAGCAAAAA GTGACTAGAA CAGGTCGTGT TTTAATCAAC TTTAAAATGA CCGACTATAC	3720
TTCAAGTTT TCTATGCAAA AGTGGGTAA AACGAGGAA GAGGCCCAGA AGTTTGACCT	3780
CATCAAGAAG AATTCTTGGC TCCGAGTTCG AGGGAATGTG GAGATGAATA ACTTCACACG	3840
CGATTTGACT ATGAACGTAC AGGATCTGCA GGAAGTTGTT CACTATGAGC GGAAGGATTT	3900
GATGCCAGAA GGTGAGCGTC GGGTTGAGTT TCATGCTCAT ACTAACATGT CCGACTATGGA	3960
TGCTTTGCCA GAGGTCGAAG AGATTGTGTC AACAGCTGCT AAGTGGGGAC ACAAGGCGGT	4020
TGCTATCAGC GACCATGGGA ATGTCCAGTC CTTCCACAT GGCTATAAGG CGGCTAAGAA	4080
AGCGGGAATC CAGCTGATCT ATGGGATGGA AGCCAATATC GTGGAGGACC GTGTCCCTAT	4140
CGTCTATAAC GAAGTGGAGA TGGACTTGTC AGAAGCAACC TACGTGGTCT TTGACGTGGA	4200
AACGACGGGA CTTTCAGCTA TCTATAATGA CTTGATTCAG GTTGCGGCTT CTAAGATGTA	4260
CAAGGGGAAT GTTATTGCTG AATTTGATGA ATTTATCAAT CCTGGGCATC CCTTGTCAGC	4320
CTTTACTACA GAGTTAACTG GAATTACAGA TGATCATGTC AAAAATGCCA AACCCTAGA	4380
ACAAGTTTTG CAAGAATTCC AAGAATTTG CAAGGATACG GTCCTAGTTG CCCACAATGC	4440
TACCTTTGAC GTTGGCTTTA TGAATGCTAA TTATGAGCGG CATGATCTTC CAAAGATTAG	4500
TCAGCCAGTT ATTGATACGC TGGAGTTTGC TAGAAACCTC TATCCTGAGT ATAAACGCCA	4560
TGGTTTGGGG CCTTTGACCA AGCGTTTTGG TGTGGCCTTG GAACATCACC ACATGGCCAA	4620
CTACGATGCG GAAGCGACTG GTCGTCTGCT TTTTCATCTT ATCAAAGAGG TAGCAGAAAA	4680
ACATGGTGTG ACCGATTTAG CTAGACTCAA CATTGATCTA ATCAGTCCAG ATTCTTACAA	4740
AAAAGCTCGG ATCAAGCATG CGACCATCTA TGTCAAGAAT CAGGTAGGTC TAAAAAATAT	4800
CTTTAAGCTG GTTTCCTTGT CTAATACCAA GTATTTTGAA GGAGTGCCAC GGATTCCGAG	4860
AACGGTTCTA GATGCCCATC GAGAGGGCTT GATTTTAGGT TCAGCCTGTT CAGAGGGTGA	4920

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AGTTTGTGAC GTGGTCGTTT CTCAAGGTGT GGATGCGGCG GTTGAGGTGG CCAAGTATTA	4980
TGATTTTATC GAGGTCATGC CACCGGCTAT CTATGCACCC TTGATTGCCA AAGAGCAGGT	5040
CAAGGATATG GAGGAACTCC AGACCATTAT CAAGAGTTTG ATAGAGGTG GAGACCGCCT	5100
TGGCAAGCCT GTTCTGGCTA CGGGAAATGT TCACTATATC GAACCGGAAG AAGAGATTTA	5160
TCGTGAAATT ATCGTCCGTA GTTGGGACA GGGTCCGATG ATTAATCGAA CTATCGGTCA	5220
TGGTGAACAT GCCCAACCAG CACCACCTCC AAAGGCTCAT TTTCGAACGA CTAATGAGAT	5280
GTTGATGAA TTTCCTTTT TGGGAGAGGA ACTGGCTCGT AAAGTGGTTA TTGAAAACAC	5340
CAATGCCTTG GCAGAAATAT TTGAATCCGT TGAAGTCGTT AAGGGTGAAT TGTATACGCC	5400
TTTCATCGAC AAGGCTGAAG AAACAGTGC TGAGTTGACC TATAAGAAAG CTTTGTAGAT	5460
TTATGGAAAT CCGCTGCCAG ATATTGTTGA TTTGCGGATT GAAAAAGAA TAACATCCAT	5520
ACTGGGGAAT GGATTTGCTG TGATTTATCT GGCATCGCAG ATGCTGGTGC AACGTTCTAA	5580
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GATTGGGATT ACGGAGGTCA ATCCTCTCTC TCCTCACTAT GTCTGTGGTC AGTGTGAGTA	5700
CAGTGAGTTT ATCACAGATG GTTCGTACGG TTCAGGATTT GATATGCCCC ATAAGGACTG	5760
TCCAAACTGT GGTCAAAAC TCAGTAAAA CGGACAGGAT ATTCCGTTTG AGACCTTCCT	5820
TGGTTTGTAT GGGGATAAGG TTCCTGATAT TGACTTGAAC TTCTCGGGAG AAGATCAGCC	5880
TAGCGCCAC TTGGATGTGC GTGATATCTT TGGTGAAGAA TATGCCCTCC GTGCGGGAAC	5940
GGTTGGTACG GTAGCTGCCA AGACTGCCTA TGGATTGTGC AAAGGTTACG AGCGAGATTA	6000
TGGCAAGTTT TATCGTGATG CAGAAGTAGA ACGCCTCGCT CAAGGAGCGG CGGGTGTCAA	6060
GCGGACAACA GGCCAACACC CGGGGGGAAT CGTTGTTATT CCGAACTACA TGATGTCTA	6120
CGATTTTACG CCTGTCCAGT ATCCAGCAGA TGATGTCACG GCTGAATGGC AGACCACTCA	6180
CTTTAACTTC CACGATATCG ATGAGAACGT CCTCAAATC GATGTACTGG GACATGATGA	6240
TCCGACTATG ATTCGAAAAC TTCAGGATTT GTCTGGTATT GACCCTAATA AAATTCCTAT	6300
GGATGACGAA GCGGTGATGG CACTCTTTC TGGGACTGAT GTGCTAGGGG TAACACCTGA	6360
ACAAATTGGA ACGCCTACGG GTATGTTGGG GATTCCAGAG TTTGGAACAA ATTCGTACG	6420
TGGAATGGTA GACGAAACCC ATCCGACAAC CTTTGCAGAA TTGCTTCAGC TGTCTGGTCT	6480
GTCCCACGGT ACTGATGTTT GGTGGGGAA TGCTCAGGAT CTGATTAAGC AAGGAATAGC	6540
GGACCTATCG ACTGTTATCG GTTGTGCGGA CGACATCATG GTTACCTCA TGCATGCGGG	6600
TCTGGAACCT AAGATGGCCT TTACCATTAT GGAACGGGTA CGTAAGGGTT TGTGGCTAAA	6660
GATTCAGAA GAGGAGAGAA ATGGCTATAT CGAAGCAATG AAGGCTAATA AGGTGCCAGA	6720

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GTGGTATATC GAATCCTGTG GGAAAATTAA GTACATGTTC CCTAAGGCC ATGCGGCAGC	6780
CTACGTTATG ATGGCCTTGC GTGTAGCTTA CTTCAAGGTT CACCATCCTA TTTATTACTA	6840
CTGTGCTTAC TTCTCCATTC GTGCTAAGGC TTTTGATATC AAGACCATGG GTGCGGGCTT	6900
GGAGGTCATC AAGCGCAGAA TGGAAGAAAT CTCTGAAAA CGGAAGAACA ATGAAGCCTC	6960
TAATGTGGAA ATCGATCTCT ATACAACCTC TGAGATTGTC AATGAGATGT GGGAACGAGG	7020
TTTCAAGTTT GGTAATTAG ATCTCTACTG TAGTCAGGCG ACAGAGTTCC TCATCGACGG	7080
GGATACCCCT ATCCCACCAT TTGTAGCAAT GGATGGTCTG GGAGAGAAGC TTGCCAAGCA	7140
ACTGGTGGCG GCGCGTGAAG AGGGAGAATT CCTCTCTAAA ACAGAACTAC GCAAGCGTGG	7200
TGGACTCTCA TCAACCTTGG TTGAAAAGAT GGATGAGATG GGTATTCTTG GAAATATGCC	7260
AGAGGATAAC CAGTTGAGTT TGTTCATCA GTTGTTTTAA AAAATTGCTT AATAATCTAT	7320
TAAAAGAGGC TAACGTATAT CCAATAGATT TACATTAGCT TTCTTTTGTG T'AAAATAGT	7380
CTATGGAAAG AGGGTGAGAG TATGTCAAAG ATGAGTATAA GCATCCGTCT GGATAGTGAG	7440
GTTAAGGAGC AGGCCCAACA GGTGTTTAGT AATCTGGGAA TGGATATGAC AACAGCTATT	7500
AATATTTTCC TTCGTCAGGC AATTCAATAT CAGGGATTAC CTTTGTGATG TAGACTAGAC	7560
GAAAATCGGA AGTTGCTCCA AGCGTTAAGC GATTTAGACC AAAATCGTAA TATGAGCCAG	7620
TCTTTTGAAT CAGTCTCAGA TTGTATGGAG GACTTACGTG CTTAAGATTC GTTATCATAA	7680
ACAGTTTAAA AAAGATTTTA AGTTGGCTAT GAAGCGTGGT TTGAAGGCAG AATTATTAGA	7740
AGAAGTTTGT AATTTCTGG TTCAAGAAAA AGAACATCCT GCCAGAAATC GTGATCATTC	7800
ATGACGGCA TCCAAGCATT TTCAAGGAGT TCGTGAATGC CATACCCAGC CAGATTGGCT	7860
TTTGGTTTAT AAAGTAGACA AGTCGGAATT GATTTTAAAT TTGCTGAGGA CAGGCAGTCA	7920
CAGTGATTTA TTTTAATCTA TTTTAAGGGG GTTCTCATGA AACTAAGAAT ATTTGCGGAA	7980
GATAAGCCGG CTAAGAAGGT ATTTGAATAT CAATTAGAAC TTGCTGATCG TACAATTCTT	8040
CTATCGACAG CACTCTTGTC AGGTGCTATT GCTTTAGCAG GAATCTTTTC TGCTTTGAAA	8100
GAAAAATAAA AATAGAAAAG AGAAAACAGA ATGGTTTAC CAAATTTTAA AGAAAATCTA	8160
GAAAAATATG CGAAATTGTT GGTGCGAAC GGAATTAACG TGCAACCTGG TCACACTTGT	8220
GCTCTCTCTA TTGATGTGGA GCAACGTGAA TTGGCACATC TAATCGTGAA AGAAGCTTAT	8280
GCCTTGGGTG CGCATGAGGT CATCGTTCAG TGGACAGATG ATGTGATTAA CCGTGAGAAA	8340
TTCTCTCATG CCCCAGTGA GCGTTTGGAC AATGTGCCAG AATACAAGAT TGCTGAGATG	8400
AACTATCTCT TGGAGAATAA GGCTAGCCGT CTTGGAGTTC GTTCATCTGA TCCAGGTGCC	8460

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TTGAACGGAG TGGACGCTGA CAAGCTTTCA GCTTCTGCTA AAGCTATGGG ACTTGCCATG	8520
AAGCCTATGC GTATCGCAAC TCAATCTAAC AAGGTTAGCT GGACTGTAGC AGCTGCAGCA	8580
GGACTTGAGT GGGCTAAGAA AGTCTTCCCA AATGCTGCGA GCGACGAAGA AGCAGTTGAT	8640
TTCTTTGGG ACCAAATTTT CAAAACCTGC CGTGTCTACG AAGCAGATCC TGTTAAGGCT	8700
TGGGAGGAAC ATGCAGCCAT TCTCAAGAGC AAGGCCGATA TGCTTAATAA GGAGCAATTT	8760
TCAGCCCTTC ACTACACAGC GCCAGGAACA GATTTAACAC TTGGTTTGCC AAAGAACCAC	8820
GTTTGGAAT CAGCTGGTGC TGTCAATGCA CAGGGCGAAG AATCTTGCC AAATATGCCA	8880
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AAACCGCTTA GCTACAACGG AAATATCATT GAAGGCATTA AGGTGACCTT TAAGGATGGA	9000
CAAATCGTAG ATATCACTGC TGAGAAGGCT GATCAGGTTA TGAAAGACCT TGTCTTTGAA	9060
AATGCGGGTG CGCGTGCCTT GGGTGAATGT GCCTTGGTAC CAGATCCAAG TCCAATTTCT	9120
CAGTCAGGCA TTACCTTCTT TAACACCCTT TTCGATGAAA ATCGCTCAA CCCTTGCGT	9180
ATCGGTGCAG CCTATGCGAC TAGCGTTGTT GATGGAGCGG AGATGAGCGA AGAGGAGCTT	9240
GAAGCTGCAG GGCTTAACCG TTCAGATGTT CACGTAGACT TTATGATTGG TTCTAACCAA	9300
ATGGATATCG ATGGTATTCG TGAGGATGGA ACGCGGGTAC CTCTTTTCCG TAATGGGAAT	9360
TGGGCAAAT AAGGAGATAA TATGTTAGGA AGTATGTTTCG TTGGTCTCCT AGTGGGATTT	9420
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GTTTGATCG GAGCCTTTCT AGGTCACTTG CTCTTTGGAA CTGGGGGCC AGTTTATCA	9540
GGAACAGCTA TTATCCAGC GATTTTAGGA GCCATGATTG TTTTAGCTAT TTTTGGAGA	9600
CGAGGAA	9607

(2) INFORMATION FOR SEQ ID NO: 81:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 14231 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 81:

CTACAAGATA ATTCCAGCTA TAACATCCGC TATAATAGTA AGAGCGAGCT CTATGATAAG	60
GCTCATTAGT TTCACCTCCT CTCACGAACC CATAGGAACG TAATCGGTAA CCGATGACAA	120
AAATAGTATA CCACAATACA TTTAGATCAT CAAGGTCCT TAATTCTTGA AATATCAGAT	180
CTAAGAGAAA AATCTTTAAA ATCAGAAAAA CGCATAATAT CAGGTGTGCA AAACTTGAT	240

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ACTATGCGTT TTATTGTGGG AAGGTTTACT CCATTTTCTC CTGAAATTGA GTTTTGTGCC	300
AGCCTCTGTT TTTAGGGTTG CTAAGAAAAT AATGTCATGT GGTGAATATT TGTAATCAG	360
TCAGCAGACA GAACGATACT CTTCGAAAAT CTCTTCACAT CATGTCAGCT TCGTCTTCC	420
GTATATATGT GACTGACTTC ATCAGTTCCTA TCTACAACCT CAAAACAGTG TTTCGAGCTG	480
ACTTGATCAA TTTTCAAATC TGTACTTTGA GCAAGCTGAG ACTAGCTTCC TATTTGATTT	540
TCATTGAATA TCAGAAACCC ATTCTCCATC AAATAATTCG ACTGCGTCTA ATAATTTTGT	600
ATCTGGCACG GTGTCTGAAA TAAAGGTTGT GTATTGGAG AGGGGATTAA TTTTAAAAA	660
TCCAGTCTTG TAAAAATTAG AACTATCAAT CAGTAAGATG GTTTCATGGG CTTTGTCAAT	720
AATATTCTTT TTTGAAATAG CTTGGCTGAG AGAAGCTTCA TAAACATATT GGTCATCAAT	780
ACCTCTTGCT GAACAAAATG CTAAATCGAT ATTAAAAATG TCTAATAAAG AATTTTCCTT	840
ATCATAGTTG ACCACGGAAC AGGATTGATG TTGACCTCG CCAGATGTGA TAAAGATTTT	900
GGAGCTATCT TTAACAGTTT CAGATAGGGT TTGTGCAGTA TGTAAACCAT TTGTAAAAAT	960
AATCAAATTA TCAAGTTCAG AAAGATAGGG ACAGAGTTCG TAGACAGTAG TACTAGAATC	1020
TAGATAGATA CACATACCAG ACCGAATAAA GTCTTTAGCG AGACTAGCGA TTAGTCTTTT	1080
TTGCCTAGTA CTTTCTCCTT CACGTATTTG ATGAGAAAGT TCAATTGTGT TCATAGAGGA	1140
CAGGCTCACG TATCCGTGCT TTCTTTTGAT AAGACCTTGA TTTTCTAAGA AAATTAAATC	1200
ACGACGTAAG GTACTTGTGC TGGAGAAAGT GATTTCTGCC AGCTCTTTTA CGGCAATTCT	1260
TTTTTTCTTT TTGATAATTT CAATCAATTC AAGTACACGT TCATCTTTTA TCATAAGCTC	1320
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TTTATCTTGG GATATTGACT TTCTACTAGC TAAAATTCTT GAAAGTATCC GCTTGGCTAA	1680
TACTAGTTAC AAGATTTTAT CTATCGGTAT TGACACATGG GGAGTTGATT TTGGACTGAT	1740
TGATAATGAA GGTAAAGCTGT TATTACAACC TGTTCATTAT CGTGATGAAA GAACAAAGGG	1800
AGTGTTAAAG GAAATATCTG AAATGACTGA ATTAGAAAAA CTGTATTCAG AGACAGGAAA	1860
TCAGATTATG GAGATAAATA CCTTGTTCCTA ACTCTTTAAG GCACGTCAAG AATCTCCTGA	1920
CTCTTTCTAT AAGACCAATA AGATTCTTTT AATGCCAGAT TTGTTTAATT ATCTCTTGAC	1980

544					
AGGTAAGTTT	GCTACAGAAA	AAAGCATTGC	TTCAACAACCT	CAATTATTTG	ATCCTAGGAG
2040					
TCAAAAATTGG	AATCAGAATA	TCTTAAAACCT	ATTGGAATTG	GATTCATCTT	TACTTCCTGA
2100					
AATGTGTTTCA	GAGGGAAATG	TTCTTGGAAG	GATAAAAGAG	GAGTATGGTT	TAGGCGATAT
2160					
TCCTGTGTGTG	AATGTTTGTA	GTCATGATAC	AGCAAGCGCG	ATTGTCTCAG	TACCTAAGAC
2220					
AGAAGGTAGT	TTATTTATTT	CATCAGGTAC	TTGCTCTTTG	CTTGGAGTGG	AACCTACTTC
2280					
ACCGATTCTT	ACTACCGAAT	CCTTCAGTTA	TGGATTTACA	AATGAAGTCG	GTAAGATGG
2340					
AGTGATTACA	TTTCTGAAGA	ATTGTACAGG	GTTGTGGATC	ATAGAGGAAC	TAAGACGTTT
2400					
ATTTGAACGA	AGAGGGAAAG	CCTATTCTTT	TGATGATATT	AGGACAATGG	TGGAGAAAGA
2460					
AAAAGAAAA	CTTCCTCTGA	TTGATACTGA	ATCAACTGAA	TTTGCAACAG	AATCTGATAT
2520					
GCACAAGACT	TTGACAGAAT	ATCTAGCTTA	TCATCATGAA	ACTAGAGAGT	GGACAGATGG
2580					
ACAACTATTT	AAGATTGTTT	ATGAAAGCCT	AGCTGAAACG	TATAGGAAAG	CGATAGAGTT
2640					
ACTAGAGAA	CTAACTCATA	AGGTTTATAA	GAGGATATAT	GTGATTGGAG	GAGGTGCTAG
2700					
AGCCAGTTAC	TTTAACCAA	TGATTGCTGA	TAGAACTGGT	AAAGAGGTTC	TTACAGGTTT
2760					
GACTGAGGCT	ACAGCTGTGG	GGAATATTGT	TGTGCAGCTC	ATAGCTATGG	GACAATTAAA
2820					
AGGGATGGAA	GAGGCTCACC	ATGTTATTGA	GGAGTTTCTA	CAATTAGAGA	GTTATTACTC
2880					
CCAAAAGAAT	TAAAAAGATT	GAGAGTTTGT	AAATTTGCCT	CCCTCCCCCT	TCTTAGCTTT
2940					
TGTGCAGGAA	GGGGGATAA	TTGGTGAATT	GAAAAATATT	TAGTGTTTTG	ATATGAGGAG
3000					
GACAAGGATG	TCAGATGTAA	AACAAGAATT	AATTAAATAT	GGTAAGAAGC	TAGTAGAAAC
3060					
AGATTTGACG	AAAGGAACAG	GTGGGAATCT	CAGCGTTTTC	GATCGTGAAA	AACAATTGAT
3120					
GGCAATTACC	CCGTCGGGTA	TTGATTCTTT	TGAAATCAAA	GAATCCGATA	TTGTAGTGAT
3180					
GGATATTAAT	GGAAATGTTG	TAGAGGGAGA	ACGCTTGCCA	TCTAGCGAAT	GGTATATGCA
3240					
TTTGATTCAA	TATCAAATCT	GTGATGATAT	CGATGCAATT	ATCCATGCTC	ATACAACTTA
3300					
TGCAACAGTA	TTAGCTTGTC	TCAGAGAACC	ACTTCCAGCG	AGTCATTATA	TGATTGCAGT
3360					
GGCAGGGAAA	GATGTTCTGGG	TAGCTGAGTA	TGCAACATAT	GGCACGAAAG	AATTGGCTGT
3420					
GAATGCAGCT	AAAGCAATGG	AAGGTCGTAG	AGCAGTTTTA	CTAGCGAATC	ATGGAATTTT
3480					
AGCAGGTGCA	CAAAATTTAT	TGAATGCATT	TAATATTGTT	GAAGAAGTTG	AATATTGTGC
3540					
AAAAATTTAT	TGTTTAGCTA	AGAATTTTGG	AGAGCCAGTA	GTTCTTCCTG	ATGAGGAGAT
3600					
GGAATTGATG	GCAGAAAAAT	TTAAAAACATA	CGGTCAGAGA	AAATAGGGAG	GATATTAATG
3660					
TTAAAAACATA	TACCGAAAAA	TATTTCTCCA	GATTTATTGA	AGACTTTAAT	GGAAATGGGA
3720					
CATGGAGATG	AAATAGTATT	AGCTGACGCC	AATTATCCTT	CTGCCTCATG	TGCAAATAAG
3780					

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CTAATTCGTT GTGATGGTGT AAATATTCCA GAATTATTAG ATTCCATTCT GTATTTAATG	3840
CCATTAGATA GTTACGTCGA TAGTTC AATT CAGTTTATCA ACGTTGTTTC GGGTGATGAT	3900
ATTCCTAAGA TATGGGGTAC CTATAGACAG ATGATTGAAG GTCATGGTAC AGATCTTAAA	3960
ACGATTACTT ATCTTAGAAG AGAAGACTTT TATGAACGTA GTAAGAAAGC TTATGCTATT	4020
GTTGCTACAG GAGAACTTC ACTTTATGCT AATATTATCC TTAAGAAAGG AGTAGTTGTT	4080
GAAAGAGAAA ATGTTCAATA GAGGAATTTT AGTTGCCAGT CATGGTAATT TTGCTAGCGG	4140
AGCTCTCATG ACCGCAGAAA TGTTTGTTGG TGAGACAACA AATGATAGAG TTAGGACATT	4200
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TAATAATGTG GCTTTGTCAC GGTTTTAAAA TTTGGATTCA GTTGATATTG TAACAGGGTT	4380
TAATATCCCT CTCCTAGTGG AATTAAATATC AAGTTATGAT TCAAAAATCA ATTTAGAAGA	4440
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GGAAGAAGAT TTATGTCTAT AGAGTTTGT CGTATTGATG ACCGTCTGGT ACATGGTCAA	4560
GTTGTCACTA CGTGGCTAAA AAAGTATGAT ATTGAGCAAG TTATCATTTG TAATGATCGC	4620
ATCTCAGAAG ATAAAACACG ACAATCTATT TTAAAGATTT CTGCACCGGT AGTTTAAAA	4680
ATTGTTTTCT TTAGTGTAAG ACGGTTTGTG GAAGTTTAA ACTCTGTGCC AATAAAAAAG	4740
AGAACAATGC TGATATATAC AAATCCAAAA GATGTGTATG ATTCTATTGA AGGAAATTTA	4800
AAATGGAGT ACCTCAATGT AGGACAGATG AGTAAAACGG AGGAAAATGA AAAGGTAACG	4860
GGAGGTGTAG CTCTAGGTGA AGAAGACAAA TATTATTTTA AGAAAATAGT TGATAAGGGA	4920
ACGAGAGTTG AAATTCAAAT GGTTCCTAAT GATAAAGTTA CAATGTTGGA AAAATTTTTA	4980
TAAAAATAAT TTAAGGAGGT ACAGTATATG CTATTCACAC AAGCATTAAT GGTGACATTA	5040
GTTGGGATTA TTGCCACTAT TGAATAAAT GGACCGTTAT TTATGATTCA CCGTCCGTTA	5100
GTTACAAGTG CAATGGTTGG CTTAGTATTA GGAGATTTCA CCCAAGGTGT TCTTATTGGT	5160
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ACTATTTTCT GTGCGATTAT TGGTACTGCA TTTGGTATTT TATCTGGTCA AGGAGAACT	5280
GCTGGTATCG CTATAGCAGT TCCAATTGCA GTTGCTACCC AACAGTTGGA TGTCTTTGCA	5340
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TCAAAGATCG GTTTTATCA TTATTCAAGT TTGGTTTTAA TCACGTTATT TAAAATTGTA	5460
CCAATTTTCC TAGCTATTAT GCTTGGAGGG GAATATGTTG CAGACTTGTG TGCTAAGGTT	5520

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CCACCAATCG TTATGCAGGG ACTTAACTCT GCAGGTGCTT TACTACCTTC AATTGGTTTT	5580
GGTATGCTTT TAAATATGAT GCTCAAGAAA AATATGTGGG TATTCCTGTT GATTGGATTC	5640
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GAGGAGCATC TTGATCTATG ATGAATAATA AAGTAACTAA AGTTGAACTT AAAAAAGTTT	5820
TCAAACGAAG TTTTATGTAT GGTCTTCAT GGAATATGA GAGAATGCAG AACCTAGGTT	5880
TTCTATATAC AATTCCTCCA GTATTGAAAA AACTATACCC AGACAAAGAT TCAGCTTCTC	5940
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GTATTAAAGT TGGCTTGATG GGGCCACTGG CTGGTCTAGG AGATAGTTTG TTCTGGCTGA	6120
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GTATCTTTAT CGCCTTAATA TTGTTAATA TTATTAATAT TCCTGTAAA TATTTGCTT	6240
TGAAATATGG GTATACTAAG GGTCTAGTC TTATCCAAGA AAATAATACA AAAGGAACAT	6300
TGAATCGCGT TACGAGTATG GCGACAGCAT TAGGGCTAGT ACTAGTGGGT GGTTCGATTC	6360
CATCAATGGT TGGTATTAAAT TTTGGATTAG AATTTAAGCA GGGGGAACCT GTTATTTCTG	6420
TTCAAGAAAT GATTACAAAA TTAATCCAG GATTATCCC TATGGCTTG ACTTTATTAA	6480
TGTGTAATTT AATTAGAAAA GGAAGAATC CGGTGTACT AATCTTTAGT GTTATGGCTA	6540
TTGGAGTTAT TCTAGTTGTT TTAGGAATTT TGAAGTAGTA GAAAGTGTGG AGGTGGTATT	6600
TGGGATATCA CCTCCATTTT GGAAGAGAGG TAAAGAGTGA AATTATGGTA TAAGAAAGCT	6660
GCCGCAAAAT GGAATGAAGC CTTGCCGATT GGAACGGTC ATTTAGGTGG TATGATTTAT	6720
GGTTCAGCTA CAAAAGAATG TATTCAACTA AACGATGAGA CTATTTGGTA TAGAGGAAAG	6780
TCAGATAGAA ATAATCCAGA CTCACTATTG CATCTTAAAA AAATTCGGGA ATATCTTTTA	6840
GATGGAGAAA TTCAGAAAGC CGAAGAATTG ATAAAGTTAA CAGTGTTTGC TACCCCAAGA	6900
GATCAAAGCC ACTATGAATT ACTTGGGGAA CTTTACATTG AGCATATAGA TATTCAGTCT	6960
TGTGCTCTTT CATTGTATGA AAGAGAGCTA GATTTAGATA CAGCTATTTT TAATGTTGTG	7020
TTTGAGCCTA ATAGTTGTAA TTTACAAATA AAAAGAGAAT ATTTTACGAG TTTTAATAAG	7080
AATATTTTAT GTTGCCGTAT AGTGTATCA GTTCAAAACA CATTAATTTT AAACATTAAT	7140
TTGGGTAGAA ATAAACGGTT TAATGACGAA GTATCTAAAC TGGATTCAAG TACAATTTTA	7200
ATGTCGGCCT CTGCTGGAGG TAGAAAAGGT GTTCAGTTTA AAGTAGTATG TCATTCTAAG	7260
GTTACGGATG GTGAAGTAAG TGTATTGGGA GAGACAATAG TTATTCGGAA TGCTACAGAG	7320

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GTATTTCTTT ATCTCAAATC AATGACGGAT TATTGGGGAA ATATAGATAT TTCTTCTCTT	7380
CAGGGAGAAT TTAGTACTAT TGATTACTTT ACAGAAAAAG ATGAACATGT AAAAAAATAT	7440
CAGGAGCAAT TTAATAGAGT TGATTTTAAA CTAGACTATA GTAAAGGTTG TCTTAGCATT	7500
CCAACGAATC TACTTCTTGA AAACACTAAA AAGTATAGTA ACTACTTGAC TAACTTGTTA	7560
TTTCATTATG GAAGATATCT GTTAATATCG TCTAGTCAAC CGAATGGTTT ACCTGCCAAT	7620
CTTCAAGGAA TATGGTGTGA TGAATTAAAT CCAATTTGGG GTTCTAAATA TACGATTAAT	7680
ATTAACTACTC AAATGAATTA TTGGATGGTA GGTCCATGTG ATTTACCAGA AGTAGAATAT	7740
CCATTATTTG ATATGCTCGA AAGAATGAGA GAACCGGGAA GACTAACCGC TAAGAAAAATG	7800
TATGGAGCTA GAGGTTTAC AGCACATCAT AATACGGATG GTTTTGGCGA TACGGCTCCC	7860
CAATCTCATG CCATGGGGGC TGCAATTTGG GTATTAACATA TTCCATGGTT ATGTACTCAT	7920
ATTTGGGAAC ACTATTATATA TTTCCAAGAT GAGCGTATTC TTACGGAACA TTTTGAAATG	7980
ATAAAGAAG CATTTCTTTT CTTTGAAGAT TATTTATTTG AGGTGGATGG CTACTTGATG	8040
ACAGGTCCAA GTGCTCACC GGAAAATAAA TATCGCTTAA AAAATGGTAT TGAAGGAAAT	8100
GCTTGCTCTAT CATCTACAAT TGATAATCAA ATTCTAAGAT ATTTTGTGTA TTCATGCATT	8160
GGCATTGCAA AACAATTAGG AGACAATTCG GATTTTATTA GTCGTGTGAA GGAGTTAAAA	8220
AAGAACTAC CTAAAACAAA AATAGGTAGT AATGGGCAAA TCCAAGAATG GTTAGAAGAT	8280
TATGAAGAAG TAGAGCCTGG GCATAGACAC ATTTACCTC TATTTGGGCT TTATCCTTAT	8340
AATGAGATTG ATATTCATAA AACTCCGGAA TTAGCAGAAG CAGCTAAAAT CACTATCAAT	8400
AGGAGATTAT CAAACGCTAA TTTTTTATCT TCACAGGAGA GGGAGCAAGC GATTAATAAT	8460
TGGTTAGTAA GTGGTTTGCA TGCTAGTACA CAAACAGGTT GGAGTGCTGC ATGGCTGATT	8520
CATTTTTTTG CGAGACTATA TCAAGGTGAA CCTGCTTATA ACCAGATTAA TGGTGTGTTA	8580
AATAATGCCA CTCTTGGCAA TTTATTTCTT GACCATCCAC CATTTCAAAT TGATGGTAAT	8640
TTAGGTTTGG TGAGTGGAAT TTGTGAATTA TTAGTACAGA GCCATCATAA TTGGTTATCA	8700
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CGAGCATATA AGGTATCGTT TGCTTGGAAA AATGGGGATA TAACATTCCT AAAATTGGAA	8820
GGAGGAAACA AAGATCAAAA AGTAAGAGTA AGAATATATG GCAAAAATAC TGATGTACAA	8880
AATATTGAAT TGGTATTTAA TTCAGAAAAA ATTATTGAGT TAAATTTTGA GGTATAAGTC	8940
ATGAATAAAG AAAAAATAAA AAGAAAATTA ATCACAATAT TGTTTGTATG TATTGGGATG	9000
TTATGTTTTG GATTGTTAGC AGGAGTTAAG GCTGATAATC GTGTTCAAAT GAGAACGACG	9060

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ATTAATAATG	AATCGCCATT	GTGCTTTCT	CCGTTGTATG	GCAATGATAA	TGGTAACGGA	9120
TTATGGTGGG	GGAACACATT	GAAGGGAGCA	TGGGAAGCTA	TTCCTGAAGA	TGTAAGCCA	9180
TATGCAGCGA	TTGAACTTCA	TCCTGCAAAA	GTCTGTAAAC	CAACAAGTTG	TATTCCACGA	9240
GATACGAAAG	AATTGAGAGA	ATGGTATGTC	AAGATGTTGG	AGGAAGCTCA	AAGTCTAAAC	9300
ATTCCAGTTT	TCTTGGTTAT	TATGTCGGCT	GGAGAGCGTA	ATACAGTTCC	TCCAGAGTGG	9360
TTAGATGAAC	AATTCCAAAA	GTATAGTGTG	TTAAAAGGTG	TTTTAAATAT	TGAGAATTAT	9420
TGGATTTACA	ATAACCAGTT	AGCTCCGCAT	AGTGCTAAAT	ATTTGGAAGT	TTGTGCCAAA	9480
TATGGAGCGC	ATTTTATCTG	GCATGATCAT	GAAAAATGGT	TCTGGGAAAC	TATTATGAAT	9540
GATCCGACAT	TCTTTGAAGC	GAGTCAAAAA	TATCATAAAA	ATTTGGTGTG	GGCAACTAAA	9600
AATACGCCAA	TAAGAGATGA	TGCGGGTACA	GATTCTATCG	TTAGTGGATT	TTGGTTGAGT	9660
GGCTTATGTG	ATAACTGGGG	CTCATCAACA	GATACATGGA	AATGGTGGGA	AAAACATTAT	9720
ACAAACACAT	TTGAAACTGG	AAGAGCTAGG	GATATGAGAT	CCTATGCATC	GGAACCAGAA	9780
TCAATGATTG	CTATGGAAAT	GATGAATGTA	TATACTGGGG	GAGGCACAGT	TTATAATTTT	9840
GAATGTGCCG	CGTATACATT	TATGACAAAT	GATGTACCAA	CTCCAGCATT	TACTAAAGGT	9900
ATTATTCCTT	TCTTTAGACA	TGCTATACAA	AATCCAGCTC	CAAGTAAGGA	AGAAGTTGTA	9960
AATAGAACAA	AAGCTGTATT	TTGGAATGGA	GAAGGTAGGA	TTAGTTTCATT	AAACGGATTT	10020
TATCAAGGAC	TTTATTCGAA	TGATGAAACA	ATGCCTTTAT	ATAATAATGG	GAGATATCAT	10080
ATTCTTCCTG	TAATACATGA	GAAAATTGAT	AAGGAAAAGA	TTTCTCTAT	ATTCCCTAAT	10140
GCAAAAATTT	TGACTAAAAA	TAGTGAGGAA	TTGTCTAGTA	AAGTCAACTA	TTTAAACTCG	10200
CTTTATCCAA	AACTTTATGA	AGGAGATGGG	TATGCTCAGC	GTGTAGGTAA	TTCTTGGTAT	10260
ATTTATAATA	GTAATGCTAA	TATCAATAAA	AATCAGCAAG	TAATGTTGCC	TATGTATACT	10320
AATAATACAA	AGTCGTTATC	GTTAGATTTG	ACGCCACATA	CTTACGCTGT	TGTTAAAGAA	10380
AATCCAAATA	ATTTACATAT	TTTATTGAAT	AATTACAGGA	CAGATAAGAC	AGCTATGTGG	10440
GCATTATCAG	GAAATTTTGA	TGCATCAAAA	AGTTGGAAGA	AAGAAGAATT	AGAGTTAGCG	10500
AAC TGATAA	GCAAAAATTA	TTCCATCAAT	CCTGTAGATA	ATGACTTTAG	GACAACAACA	10560
CTTACATTAA	AAGGGCATAC	TGGTCATAAA	CCTCAGATAA	ATATAAGTGG	CGATAAAAAAT	10620
CATTATACTT	ATACAGAAAA	TTGGGATGAG	AATACCCATG	TTTATACCAT	TACGGTTAAT	10680
CATAATGGAA	TGGTAGAGAT	GTCTATAAAT	ACTGAGGGGA	CAGGTCCAGT	CTCTTTCCCA	10740
ACACCAGATA	AATTTAATGA	TGGTAATTTG	AATATAGCAT	ATGCAAAACC	AACAACACAA	10800
AGTTCGTAG	ATTACAATGG	AGACCCTAAT	AGAGCTGTGG	ATGGTAACAG	AAATGGTAAT	10860

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TTTAACTCTG GTTCGGTAAC ACACACTAGG GCAGATAATC CCTCTTGGTG GGAAGTCGAT	10920
TTGAAAAAAA TGGATAAAGT TGGGCTTGTT AAAATTTATA ATCGCACAGA TGCTGAGACT	10980
CAACGTCTAT CTAATTTTGA TGTGATTCTA TATGACAATA ATAGAAACGA AGTTGCTAAG	11040
AAACATGTTA ATAATTTGTC GGGTGAATCT GTTAGTCTAG ATTTCAAAGA AAAAGGAGCA	11100
AGGTATATTA AAGTTAAATT ACTAACGAGT GGAGTGCCTT TGACTTTAGC AGAAGTAGAG	11160
GTTTTTAGAG AATCAGATGG TAAGCAATCT GAAGAGGATA TAGATAAAAT AACAGAAGAT	11220
AAAGTAGTCT CTACAAATAA GGTAGCTACT CAAAGTTCAA CCAATTATGA GGGTGTAGCT	11280
GCTTTAGCAG TTGATGGTAA TAAAGATGGA GATTACGGAC ATCATTCGGT GACTCATACT	11340
AAGGCAGATT CTAACGCTTG GTGGCAGGTC GATCTGGGAG AAGAGTTTAC GGTTCCTAAA	11400
GTTGATATTT ATAATAGAAC AGATGCCGAA CCTCAGCGTT TATCTAATTT TGATGTTATT	11460
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TTGTTATCTT TAAAAGTACC TTCTGTAGGG GCTAAGCTAG TCAAATAGA ATTAAATCA	11580
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TTTTCTCGTC TAGCAGTTGA TGGAAATAAA AACGCAGATT ATGGTCATCA TTCAGTGACT	11760
CATACCAAAG AAGATTCTCC TTCATGGTGG GAGATAGATT TAGCACAAAC CGAAGAATTA	11820
GAAAAGTTAA TTATTTATAA TAGAACAGAT GCTGAAATTC AGAGATTATC AAATTTTGAT	11880
ATTATTATAT ATGATTCAAA TGATTATGAA GTTTTTACAC AACATATTGA CAGTTTAGAA	11940
AGCAATAATC TATCCATAGA CTTAAAAGGA CTGAAGGGAA AAAAGGTTAG AATTTCTTTG	12000
AGAAGCGCAG GAATTCCTTT AAGTTTAGCA GAGGTAGAGG TTTATACTTA TAACTAATTT	12060
TAAAAATTAT CACCCAGGCT ACCGTAAATA TAATGGAGAT GGTAGTATGA AAGAAACAGA	12120
AAAATAAGAG GAAAATAGTA TGATTCAACA TCCACGTATT GGGATTCGTC CGACTATTGA	12180
TGGTCGTCGT CAAGGTGTAC GCGAATCACT TGAAGTGCAA ACAATGAACA TGGCTAAAAG	12240
TGTGGCAGAT TTGATTTCOA GCACATTGAA ATATCCAGAT GGGGAACCTG TGGAAATGCGT	12300
GATTTCTCCA TCTACTATTG GCCGTGTACC AGAGGCTGCA GCTTCCCATC AGTTGTTTAA	12360
AAAATCAAAT GTTTGCGCAA CAATTACAGT TACACCATGC TGGTGTTATG GTAGTGAAAC	12420
TATGGATATG TCTCCAGATA TTCCTCATGC TATTTGGGGA TTTAATGGGA CAGAACCCCC	12480
AGGAGCTGTC TATCTTGACG CTGTACTAGC TTCACATGCT CAAAAAGGGA TTCCAGCCTT	12540
TGGGATTTAT GGAAGAGATG TTCAGGAAGC TAGTGACACA GATATTCCAG AAGATGTCAA	12600

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AGAAAACTT TTACGCTATC CGCGTGCAGC TCTTGCAACT GGCTTGATGA GAGACACTGC	12660
TTACCTATCA ATGGGTAGTG TTTCGATGGG GATTGGTGGT TCTATGTAA ATCCGGATT	12720
CTTCCAAGAA TACTTAGGAA TGCGAAATGA ATCGGTAGAT ATGACGGACT TCACGCGCCG	12780
TATGGACCGT GGTATTTACG ACCCTGAAGA GTTCGAACGT GCGCTCAAAT GGGTGAAAGA	12840
AAACGTAAAA GAAGGATTCTG ACCATAACCG TGAAGACCTT GTTTTAAGCC GTGAAGAAAA	12900
AGATAGACAA TGGGAATTG TTATTAAGAT GTTCATGATT GGACGTGACT TAATGGTTGG	12960
TAACCCAAGA CTTGCTGAAC TTGGTTTGA GGAAGAAGCG GTTGGTCACC ATGCTTTAGT	13020
AGCTGGTTTC CAAGGTCAAC GTCAGTGGAC AGACCATTTT CCAAATGGGG ACTTTATGGA	13080
AACTTTCCTC AATACTCAGT TTGACTGGAA TGATATTCGA AAACCATTG TATTGCGAC	13140
AGAGAATGAT TCACTAAATG GTGTGTCTAT GCTCTTAAAT TATCTATTAA CAAATACTCC	13200
ACAAATCTTT GCTGATGTGC GTAATTATTG GAGCCCAGAG GCTGTAAAC GTGTAACGGG	13260
ACATACTTTA GAGGTCGTG CTGCAGCTGG CTTCTTACAT CTAATCAACT CTGGTTCTTG	13320
TACATTTGGAT GGTACAGGTC AAGCTACTCG AGATGGCAA CCTATTATGA AACCATTCTG	13380
GGAGTTGGAA GAAAGTGAAG TGCAGGCTAT GCTTGAAAAT ACAGACTTCC CACCAGCAA	13440
CCCGAATAC TTCCGTGGAG GAGGATCTC AACTCGTTTC TTGACGAAGG GGGATATGCC	13500
AGTAACAATG GTACGTCTCA ATCTTCTAAA AGGGTTGGT CCAGTGCTAC AAATTGCAGA	13560
AGGTTACACA CTTGAACCTC CTGAAGATGT TCACCATACT TTAGATAATC GTACAGATCC	13620
AGGATGGCCA ACTACTTGGT TTGCTCCACG TTGACAGGA AAAGGTGCTT TCAAGTCTGT	13680
CTATGACGTC ATGAATAATT GGGGAGCTAA TCACGGAGCC ATAACATATG GACACATTGG	13740
AGCAGACTTG ATTACCTTGG CTTCTATGTT GAGAAATCCT GTCAATATGC ATAATGTACC	13800
TGAGGAAGAT ATCTTTAGAC CTAAAAATTG GTCCTTATTT GGAACAGAAG ATCTAGAATC	13860
AGCAGACTAT CGTGCATGTC AGTTGTGGG GCCACTACAT AAATAAACT TGTATATATA	13920
GGAGGTGAAC TTACGTCCCT CCTATCCTTT TAAAAAGATT TGTAAACAA TTCACAAATA	13980
ATTGAAAACG AATACAAAA GTAATATAAT GATGTTAAAT AGATAGCGCG GAGGCGCAGG	14040
AGGAAAATTA TATGGCTATA TTTTATGTTC CGGCAGTCAA CTTATTGGA AAAGGTGTTG	14100
TAAATGAAGT GGGTCCTTAT ATCAAGGAAC TTGGCTATAA AAAGGCACTT TTGGTGACAG	14160
ATAAGTACAT CGAAGGCAGT GATATTTTAC CTAAGACTTT AAAACCACTG GATACAGAAG	14220
GAATCGAATA T	14231

(2) INFORMATION FOR SEQ ID NO: 82:

(i) SEQUENCE CHARACTERISTICS:

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(A) LENGTH: 16995 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 82:

AGTTCTCTTA ACTTTTTTAG GATGGCATT CCGCTCTCA GGTACTCATT TTCTGCTgAA	60
GACGTTCTAA TTCTGTCCCTC TCTTCAGGTC TCGTTTTTGG CTTACGTCCC ATTTTAGGTA	120
CTCTCCCTCT TGTTTTCTCA ACAATAGTAT ACCCGTTTTT CCTGTATTGT GCTAGCCAGT	180
TAAGAAGTAT CGTACGACTT GGGAGACCGT ATTCAAGAGA AACTCTATCT TTAGTCCAGC	240
CTTCATGTCA GACTTTATTA CTCATTTCTT GTTTTAAATC AGGAGAATAG TAACGATTTT	300
TTCTTTTTTT GACGAACCTCT ATTCCGTAAC GATCAATCAA TTTAATCATG TACCTAATAT	360
TAGAATTGCT TATCCCAAAT TTATTTGAAA GCTTCTCTAA GCTATATCCT TGTTTTCTAA	420
GTTCATAGAT CTGAACTTTA TCATCATAAG TTAGTTTCAT AATAAAAACA CCCCCAAAGT	480
TAGATTTTTT CTGTCTAACT TTTGGGGTGT AGTTCATGTA CACCTGATAT GATGCGTTTT	540
ATAATTTTTA AGCCTTTTTG CCCAGCCTCG TCAAAAGTAA TGTTTTGACA CAAAATCTGT	600
GACAAAACCT TAGTTTTTAA GGTTTTAAAC TTTGTATATA CTAGTTTTTA GAAAAGGAGG	660
ATGATCTAAT GGAAGAAAAA GTATCATTGA AAGTCAGGGT TCAAAAACCTA GGGACATCGC	720
TTTCAAAATAT GGTATGCCCC AATATTGGAG CATTTATTGC TTGGGGAGTA TTGACTGCCC	780
TCTTTATCGC TGATGGCTAT CTGCCAAATG AACAGTTAGC TACTGTGTGT GGTCTATGT	840
TAACGTATTT ATTGCCAATC CTGATTGGTT ACACAGGTGG ATATATGATC CATGGCCAAC	900
GTGGTGCCGT TGTAGGAGCT ATTGCTACTG TTGGTGCAAT CACAGGTTCCT AGTGTTCCTA	960
TGTTTATCGG AGCTATGGTA ATGGGCCCAC TGGGAGGATG GACTATCAAG AAATTTGATG	1020
AGAAGTTCCA GGAAAAAATT CGTCCCGGAT TTGAAATGTT AGTTAATAAC TTCTCAGCTG	1080
GTCTCGTTGG TTTTGCAATTA TTGCTTTTGG CTTTCTACGC AATCGGTCCA GTCGTATCGA	1140
CTCTTACTGG AGCTGTTGGG AATGGTGTG AGGCTATTGT CAATGCTCGC CTCCCTTCCTA	1200
TGGCTAATAT TATCATCGAA CCGGCTAAAG TCCTTTTCCT CAATAATGCC CTCAATCATG	1260
GCATTTTAC TCCTCTGGGA GTAGAACAGG TAGCTCAAGC TGGTAAGTCA ATTCTCTTCC	1320
TATTGGAAGC TAATCCTGGA CCAGGTCTGG GAATTCTATT AGCTTATGCT GTATTGGTA	1380
AAGGTTCTGC TAAATCTTCT TCTTGGGGG CAATGGTTAT TCATTTCTTC GGAGGGATTG	1440
ATGAAATTTA CTTTCCTTAT GTTATGATGA AGCCTACTCT ATTTTTAGCT GCTATGGCAG	1500

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GAGGTATCTC TGGAACTTT ACTTTTCAAC TCTTAGACGC TGGTCTTAAA TCTCCAGCTT	1560
CACCAGGTTT TATTATTGCG ATTATAGCTA CGCGGCCAAA AGGTGTTTGG CCCCATCTAA	1620
ATGTTCTTTT AGGTGTTTIA GTGGCAGCAG TTGTTTCTTT CCTTGTAGCA GCCCTTATTC	1680
TTTCATGCAGA CAAGTCAACT GAGGATTCGC TCGAAGCTGC TCAGGCGGCT ACCCAAGCAG	1740
CTAAGGCTCA GTCTAAAGGT CAGTTAGTAT CAACTTCTGT TGATGCAGTT GTTTCGACAG	1800
ACTCAGTGGA AAAAATCATT TTCGCCTGCG ATGCTGGTAT GGGAAGCTCT GCTATGGGAG	1860
CTAGTATTCT TCGAGATAAG GTTAAAAAAG CAGGTCTAGA GATTCCAGTA TCTAATCAGG	1920
CAATCTCAAA TTTGCTTGAT ACACCAAAAA CATTAAATTGT TACTCAGGAA GAACTGACAC	1980
CAAGAGCTAA AGACAAGAGT CCAAGTGCTA TTCATGTTTC TGTGATAAT TTCTTAGCCT	2040
CCTCTCGTTA TGATGAAATT GTAGCTTCAT TAACAGGAGC TTCTCCAATA GCAGAAATTG	2100
AAGGAGATAT ACCAACTTCA GCACCAGTAG ATAGTCAGGA AAGTGACCTT AACCATATTG	2160
ATGCTGTAGT AGTTGCTTAT GGTAAAGCAC AGGGAAGTGC AACTATGGGC TGTGAAACGA	2220
TTCGGGCTAT TTTTAGAAAC AAGAATATTC GTATTCCAGT TTCTACTGCC AAAATTTCAG	2280
AATTAGGTGA ATTTAATTCT AAAAAATAA TGATTGTAAC AACTATTCTT TTACAGGCAG	2340
AAGTGCAGCA AGCAGCACCG AATTCTCAAT TTCTTATTGT GGATAGTTTA GTAACAACAC	2400
CAGAAATATGA CAAAATGGCT GCTAGAATGT ACAAATAGAA CTAGAGGTTT CTAAATTACG	2460
AATGCTATTA ACCAAACGAG AAGAACAATT ATTGAAGGCT TTCCTACATG TAGGGAAGCT	2520
TTCAATGCAA GATATGACTG AAATCTTACA GGTTCATCT AGAACAATTT ATCGAACTTT	2580
ATCAGATTTG ACAGATAGCA TGGAGCAATA TGGAAATCGAA ATAACGAAGC ATGGGAAATA	2640
CTATATTTTG ACTGGAGAGT TGGATGATTT GCCGACAGAA CTTGAAGTGT TAGTTGAGTA	2700
TAGTCCCCAA GAAAGACAAG AGTTGATTAC CTATCGCCTT CTGACTGAGA GTGGTTTGT	2760
CACCAATGAA GCATTGCAAG AGTGCACGAA ACTCAGTAAT GTAACATTA TTCAGGATAT	2820
TTTCAGATAT GATAAGCGTC TTTTAGACTT TGATCTGAAA ATTGAACGAC AAAAAGGTTA	2880
TCGGATTCTT GGTGATTTCAG TTGGTAAGAG AAGATTTTTC GCTATTTTAC TGACAAACTG	2940
TATCTCAGTA GCAGATTTTT CAACCGGTAA TTTTGGGAGC TTTGATATTT TAGAAGCAGA	3000
TAGAACTGGG CTGGCCAGTC AGATTGTTAA TAAGCAACTG TCAGGTTTTT CAGATATGGA	3060
TGCTAGGATG AAGATGTTTT TTGCGATCTT GTTATCTCTT ATAGGTCAGG AGCAAAACAT	3120
TGAAAATTCA CCTAATACTA GTAAGCAGGC TTTGGAAATT TCTCAAAAAA TTTTCAAGC	3180
TTACTCTAAG CAGACTGCAC AATTTTATAG TATTCAGGAA ATTATCTATT TTGCGAGCAT	3240
CTTGGATGAA TTAATCATTA AACGTCAGGA CAATCCGCTC TTTACGGAGA AATTTGATGG	3300

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TGAATTTTTC	TACAATATTT	CAAATCTGAT	TGATACGGTT	TCCATGTATA	CCAAGATTGA	3360
CTTTTAAAG	GACAAGGTTT	TATTCAATTT	TCTTTTCCAT	CATATTCGGC	TCAGTTTAGG	3420
CGTCCCTATC	CTTTTTCAGG	GTGAAAATTT	GCCAGAATCT	ATCCAGATTT	TAGTTGAAAG	3480
GAATAAATTT	CTTTTATACAG	TCATCAGTCT	TTTAGTGAAT	GATATTTTTC	CGAAATATCT	3540
TCATACAGAG	TATGAGTATG	GCATGATTGC	CCTACATTTT	ATCTCTAGCT	TAGGCCGTAG	3600
TCCAGAGATT	TATCCAGTCC	GTGTTTTCCT	TTTAACGGAT	GAACGTCGGG	TCACTAGAGA	3660
TTTATTAGTC	AGTAAATTA	AGAGTGTTC	TCCTTTTGTA	GAGTTGATAG	ATATTCAATC	3720
TCTAGTAGAT	TACCACAGTA	TTGATCTCAG	TCAGTATGAT	TATATTTTAT	CTACCAAGCC	3780
GCTGACTAAT	CAGGAAATCG	ATGTAATTTT	TAGTTTCCA	ACCGTCAAAG	AATTGCTTGA	3840
ATTACAGGAA	CGACTTCAGT	ATGTACAGGC	ACATCGTACA	ATTGTCGCGC	GTGATGCTAT	3900
CGCTCCAGAG	AAAAGTTATG	ACTTGCAAGA	TTATTTAATA	TCTAGTAGTC	AGCTTTTGAG	3960
TCAATTCGAG	TTGGTTCAAT	TGGAGAATAA	TCAATCATTT	GAGCACACGG	TAGAACAAAT	4020
CATCCAATAT	CAGAAGAATG	TGAGTGACAG	AGCTTACCTA	ACAAGAAAAT	TGTTATCTCA	4080
CTTCCAGAAT	AGTCCTATGG	CTATTCCTAA	TACTGGTCTG	GTGCTTTTAC	ATAGTCAGTC	4140
TAGCAAAGTA	ACAACAAATA	GTTTTACTAT	GTTTGAAGTC	AAACTACCTA	TCTCCGCATT	4200
GTCAATGAAA	CGAGAGGAAG	AAGAGGTCAA	AAGGTGTCTG	CTAATGCTAA	TGTCTAAAGA	4260
AGCTAGCCAG	GAAGCTAGAG	ATTTAATGAC	AGCTATTAGT	CAGTCGATTA	TTGAAAATCA	4320
TCTTTATACA	GAGATTTACA	AGACGGGAAA	TCAATCCATT	ATTTATCAGA	TGCTAAATAC	4380
TATTTTTTAAC	GAAAAAATTA	AGAAATTGGA	GAACATAAT	GAACTTGAA	AAACATTTGA	4440
TTAAGCTTAA	TAAACAATTT	TCTAACAAGG	AGGAAGCTAT	TTGTTATTGT	GGGCAAGTTC	4500
TTTATGAGGG	TGGATATGTT	AATGAAGACT	ATATTGAAGC	CATGATTGAG	CGAGATAAAG	4560
AGCTATCTGT	TTACATGGGT	AACTTTATCG	CCATACCGCA	TGGAACAGAT	GCAGCAAAAA	4620
ATGATGTCCT	CAAGTCTGGT	ATTACAGTCG	TTCAAGTCCC	TAGAGGGGTT	GATTTTGGGA	4680
ATGTATCTAA	CCCTCAAGTG	GCAACGGTTC	TTTTTGGTAT	TGCTGGTATT	GGTAATGAAC	4740
ACTTAGAAAT	TATTCAGAAA	ATTTCTATCT	TCTGTGCAGA	TGTAGATAAT	GTTCTTAAAC	4800
TAGCAGATGC	TCAGTCAAAA	GAGGAAGTAT	TGCGCTTATT	TGATGCTGTT	GAATAATTGA	4860
ATTTAGTCAT	TTGTCATCTA	GTATATATGT	CCCTCAAATA	GGAAAAGGAG	AAATTGAATG	4920
AAACATTCGT	TTCATTTTGG	TGCCGGTAAT	ATCGGTCGTG	GTTTTATAGG	TGAAATCTTA	4980
TTTAAAAATG	GTTTCCATAT	TGATTTTGTG	GATGTCATAA	ATCAGATAAT	TCATGCTCTG	5040

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AATGAAAAGG GCAAGTATGA AATTGAAATT GCACAGAAAG GACAGTCTCG TATAGAAGTA	5100
ACTAATGTGG CTGGCATTAA TAGCAAAGAA CATCCTGAGC AAGTCATTGA AGCGATTCAA	5160
AAGACGGATA TTATTACTAC TGCAATCGGA CCTAATATAC TCCCTTTTAT CGCCGAACCT	5220
CTAGCCAAAG GAATCGAAGC TCGCCGAGTT GCAGGAAATA CACAGGCATT GGATGTTATG	5280
GCCTGTGAAA ATATGATTGG CGGCTCTCAA TTTCTTTATC AAGAAGTCAA GAAATATTTA	5340
AGTCCGGAAG GTTTGACATT TGCTGATAAC TACATAGGTT TTCCAAATGC TGCAGTAGAC	5400
AGGATTGTTT CAGCACAAAG TCACGAAGAT TCCCTTTTTG TTGTGGTCGA CCCCTTTAAT	5460
GAATGGGTCG TGGAAACCAA GCGTCTTAAA AATCCAGATT TACGTCTAAA AGATGTGCAT	5520
TATGAAGAAG ATTTAGAACC CTTTATTGAG CGAAAACCTT TTTCAGTCAA TTCTGGACAT	5580
GCAACTTCAG CTTACATTGG TGCGCATTAT GGTGCCAAGA CAATTTTGA AGCTCTTCAA	5640
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GCCAAATGGA ACTTTGATAA AAAAGAATTG GAGAATTATC ACAAAGTCAT TATAGAACGA	5760
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GAAAGTATTC GATTAGGTGA ATTGTTGGCT AAACAATCAG TCAAAGATGT TGTATACAA	6000
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GGTAAAAGAA GCTGGACAAA AAGTCTTCAA AATCGGGAAA AGGCAGCCTA TCGGGTGTTT	6300
AAAAATCTTG ATAGGATGTC CTTTATTATG GAAAGCCTTA TTGGATTTTC TCCTCAGATT	6360
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TGAGTGTTTT AGTTAGGAAA AAGGCTTGTT GTCTATAATT GTCTGCATTA GTCTAGATTT	6780
TATTTATAGA AAATGTTATA ATAGACTGTA TTTAAAAAAT TTTAAGGAGA AATGACAGAA	6840

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ACAACGAGCT	TAATCGTGAA	AAGGAAACCG	AGCTTAACAA	GGCGCGTGAA	CAGGCTGCTG	15060
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AGTTTGATCT	TGTTCAAGCC	CAGCAAGAAA	AACCAGTCAA	GAAGAAACAG	GTCAATGTTG	15420
TGAAACGAAC	TTCTGGGCGA	GGACCTCAAG	CTAGACTGGA	TCTTCGAGGC	AAGCGCTATG	15480
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AAGTTGATAT	CATCCATGGT	ATCGGAACAG	GAGTCATCCG	TGAAGGAGTT	ACCAAATACT	15600
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(2) INFORMATION FOR SEQ ID NO: 83:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 28473 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 83:

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GAGCATTATC ATGAGGATAA GAGACGTTGT CATCTCAATC CCAATATCCC CTATCTGCTC	1800

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GTGTTTGTG	AAGACGGCTT	CAAACGGAGG	TATTTGTAAT	GTTAGAATCT	AAAAAAACAA	16440
CTCGATATGT	ATTTTATGTC	TATCTGATGT	TATTAACCTG	GGGAATCTTA	TTTAAGTTTG	16500
AAACAAATCC	TGAATTTATA	GCATTTTCT	TAGCTCCAAG	GTATATCAAT	TGGATTCCAT	16560
TTTCAGAACC	ACTAATAGTC	GATGGAAAA	TTGTTTTGTC	TGAAATGTTA	TTTAATCTGA	16620
TTTTCTTTAT	TCCATTAGGT	GTTTGTTC	CTTTGATAAA	AACTAATTTA	TCTAGTTTAA	16680
GAATAGTCGG	GACAGGTTTC	TTGATTAGTT	TATTGTTTGA	GTGCTTACAG	TATATTTTAG	16740
CAATAGGTAT	AACAGATATA	ACGGATTGGA	CTTTAAATAC	GCTAGGTGTC	TGTGTAGGCT	16800
TACTGATTTA	TCAAATTTTT	ATAAGAGTGT	TCAAATCACA	GACTAGAAAA	TGGATCAATA	16860
TCTTAGGTAT	GCTTAGCCTT	GGTTTTGCTT	ATCTTGTTTT	ACTGTTACTG	CATTTACTTA	16920
GTGTTTAACT	AATGATTAAA	AAGGAGAATA	TAATCACTAA	ACGCGTCTTA	ATCAGCGTCT	16980
CAGACAAAGC	GGGCATTGTT	GAATTTGCC	AAGAACTCAA	AAAACCTGGT	TGGGAGATTA	17040
TCTCAACAGG	TGGAACAAAG	GTTGCCCTTG	ATAATGCTGG	GGTGGATACC	ATTGCTATCG	17100
ATGATGTGAC	TGGTTTCCCA	GAAATGATGG	ACGGTCGTGT	GAAGACCCCTC	CACCCAAATA	17160
TCCACGGAGG	GCTTCTCGCT	CGTCGTGACT	TGGATAGCCA	CTTGGGAAGCG	GCTAAGGACA	17220
ACAAGATTGA	GCTCATTGAC	CTTGTGGTGG	TCAACCTTTA	CCCATTTAAG	GAAACTATCC	17280
TTAAACCAGA	TGTGACTTAT	GCTGATGCAG	TTGAAAATAT	CGATATTGGT	GGGCCATCTA	17340
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GTTTAGCAGC	CAAAGTATTT	CGTCACACAG	CGGCTTATGA	CGCCTTGATT	GCAGAATACT	17520
TCACAGCTCA	AGTGGGTGAA	AGCAAGCCTG	AAAAACTCAC	TTTGACTTAT	GACCTCAAGC	17580
AACCAATGCG	TTACGGTGAG	AATCCTCAAC	AAGACGCGGA	CTTTTACCAG	AAAGCTTTGC	17640
CTACAGACTA	CTCCATTGCT	TCAGCCAAAC	AGCTCAACGG	GAAAGAATTG	TCATTTAATA	17700
ATATCCGTGA	TGCAGATGCT	GCTATCCGTA	TCATCCGTGA	CTTCAAAGAT	AGTCCAACCG	17760

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ACCGTGAGGT	GGATGCTGCG	ACAGCTGAGA	AGATGCACGG	CGTTTTCCCTC	GAAATCATCA	17940
TTGCACCAAG	CTATACGGAT	GAAGCGCTAG	CCATTTTGAT	CAATAAAAAG	AAAAACTTGC	18000
GTATCCTTGC	CTTGCCATTT	AATGCTCAAG	AGGCTAGCGA	AGTGAAGCA	GAATACACAG	18060
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GGCAAGTGGT	GACTAAACGT	CAGCCAACTG	AGACAGAAGC	GACTGCTCTT	GAGTTCGCTT	18180
GGAAGGCTAT	CAAGTACGTC	AAATCAAATG	GTATTATCGT	GACCAACGAC	CACATGACAC	18240
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ACGTGGAAGA	AATCGCCAAA	GCAGGAATTA	AGGCCATCAT	CCAGCCCGGT	GGCTCTGTCC	18420
GTGACCAAGA	ATCCATCGAA	GCAGCGGATA	AATACGGCTT	GACTATGGTC	TTTACAGGTG	18480
TGAGACATTT	TAGACATTAA	GAAGATAAAA	GGGAAGAAAA	CAGTTTCTTT	CCTTTTTTGG	18540
CTTAAATAC	TAACTGAAAC	AAGATTAAAA	CGAACTTTTT	TGATATAATG	TTGGTAAATA	18600
ATTGCAAAA	GAGGTGAGG	AATGAAACTG	CTTGTTGTCG	GTTCTGGTGG	TCGTGAGCAT	18660
GCGATTGCTA	AAAAGTTACT	TGAATCAAAA	GACGTGGAAA	AAGTC'TTTGT	AGCTCCTGGG	18720
AATGATGGGA	TGACTCTGGA	TGGTTTGGA	TTGGTAAATA	TCTCTATTTT	CGAACATTAT	18780
AAATGATTG	ACTTCGCAA	GACCAATGAT	GTTGCTTGGA	CCTTTATCGG	TCCAGATGAT	18840
GCCCTTGCTG	CTGGTATCGT	GGATGATTTT	AACCAAGCTG	GACTTAAGGC	CTTTGGTCCG	18900
ACTAGGGCTG	CAGCGGAGCT	GGAGTGGTCC	AAGGATTTTC	CCAAGGAAAT	CATGGTCAAA	18960
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GTGCTCGTTG	CTGAGACGGT	TGAGCAAGCG	GTCGAAGCCG	CTCATGAGAT	GCTTTTGGAC	19140
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ATCCTGACAG	CTGATGGACC	GAAAGTCATT	GAGTTCAACG	CTCGGTTCCG	AGATCCAGAA	19500

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GCATCCAAGG GCTACCCGCT AGACTATGAA AGGGGCGTTG AGTTGCCAGC CAAGACAGAA	19680
GGCGATGTCA TCACCTACTA TGCAGGGGCT AAGTTTGGCG AAAATAGCAG AGCACTGCTC	19740
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CTTGTCCTGA	ACTCTCTGTG	TGGAAATGTT	TGCGACAGCT	GATGACATCA	TTGTCAATGA	21540
AATCGCCCCA	CGACCACATA	ACTCTGGGCA	CTATTCTATT	GAAGCCTGTG	ATTTCTCTCA	21600
GTTTGACACC	CATATTCTGG	GTGTTCTCGG	AGCACCATTA	CCAGTCATCA	AACTCCATGC	21660
GCCAGCCGTT	ATGCTTAATG	TCCTCGGTCA	GCATGTCGAG	GCTGCTGAAA	AATATGTCAC	21720
AGAAATCCCA	AGCGCCCAAC	TCCACATGTA	TGGTAAAATA	GAAGCAAAGC	ATAATCGTAA	21780
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GACCTTCACG	CTGAGTACTT	TGCGGTTCTT	GCCAGCATTG	CGACTTCAAT	CGAACGTATG	22860
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AGTACAGAGA TGTAATGAGT TCGTTCACCT TTGACTCCTG CTGTGATAAT ATTTTCCTGA	24180
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GAATGAGTTA CAGCTGGTTT GAGGCCCTGA AGAGCGGCTT TTAGGTTGGC TACAAGCGTG	24360
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GCTAGGTATT GAGGTGATGC GAGGTATAT CCCCACCAGC CTTTAGACCA GTAAGAAATC	24840

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ATGATTTCCCT TGAGCTGTTT TGGTGAGAAA TATTTACGTC CAGCATCAAT AGAAACAATT	26880
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CGCTGTTGTT TTTCATGTTT CATTGCAAAA CCTCCTGATT GCATTGTTAT ATTGATAGCG	27480
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AATTGATCGC CGCGTAGACC CAATTTTTC AAGTAAACAA GCTTGTTCCT GCCTTCAATT	28200
GAAAGAACAG TTACCTTATC ATCTTTAGCA TTGAAGAGTT CAATATCTGA AACTCTACA	28260
AGCTTGTGTT TGCGTGCACG TGAAACGAAG GTTCCTTTTC CTTGTTGGCG GACAATATAG	28320
CCATCTTTGG CAAGGTCGTT TAAGGCGCGA ACAACTGTGA TAGAGCTGAC ATCGTACATT	28380

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GAAATGAGTT CTGCTTCAGT GTAAAATTTA TCTCCACTGC TAAACTGCCC AGAGATGATT 28440
 TTATTTTSTA ATTCTCTTT TATGTATTGA TGG 28473

(2) INFORMATION FOR SEQ ID NO: 84:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 6749 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 84:

CCTGATGGGT GGTATGCGAG GATACAGTTC TGAAAATCGC CGTACTTAA TTAATGGACG 60
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 AGAACTGAT GTGCAATGC CACAACAGGC ATCAGGTATG AAACAAGGCG GTGTCCTTGC 180
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TTTTGATGAA GGAAATCGCC CAATCGGCAA CTTCTCTCTT GTAGGGTCTA CTGGGGTTGG	1320
TAAGACGGAG CTTGCTAAGC AAT'TGGCACT CGATATGTTT GGAACCCAGG ATGCGATTAT	1380
CCGTTTAGAT ATGCTCTGAAT ACAGTGACCG CACAGCTGTT TCTAAGCTAA TTGGTACAAC	1440
AGCAGGCTAT GTGGGTATG ATGACAATAG CAATACCTTA ACAGAACGTG TTCGTCGCAA	1500
TCCATACTCT ATCATTTCTCT TGGATGAAAT TGAAAAGGCT GACCCCTCAAG TTATTACCCT	1560
TCTCTCCCAA GTTCTAGATG ATGGTCGTTT GACAGATGGT CAAGGAAATA CAGTAAACTT	1620
CAAGAACACT' GTCATTATTG CGACCTCAAA TGCTGGATTT GGCTATGAAG CCAACTTGAC	1680
AGAAGATGCG GATAAACCAG AATTGATGGA CCGTTTGAAA CCCTTCTTCC GTCCAGAATT	1740
CCTCAACCGC TTTAATGCAG TCATCGAGTT CTCACACTTG ACTAAGGAAG ACCTTTCTAA	1800
GATTGTAGAT TTGATGTTGG CTGAAGTTAA CCAAACCTTG GCTAAGAAAG ACATTGACTT	1860
GGTAGTCAGT CAAGCGGCTA AAGATTATAT CACAGAAGAA GGTTACGACG AAGTCATGGG	1920
GGTTCGTCCT CTCGTCGCG TGGTTGAACA AGAAATTCGT GATAAGGTGA CAGACTTCCA	1980
CTTGATCAT TTAGATGCTA AACATCTGGA AGCAGATATG GAAGATGGCG TTTTGGTTAT	2040
TCGTGAGAAA GTCTAAGACA GAATTTTGAG GATAAAAAAG AAGGAGCCAG CTGAAAAAA	2100
CTGGTTCCTT TTTAGGTACG ACAGGCATGT CGTATAGTAG AAGTGTATTA TTCTAGTTTC	2160
AATATACTAT AGTAGCTCAG AAGTCGGTAC TTAACCGTGC TATATCAAAA CCAGTCCTGG	2220
AAAAACGTGG ACTGGTTTCG TGT'TTGATT ATTACCTTGA ACGACATGCG TTAAGTTA	2280
GTTGAACCGC CGTATGCCGA ATGGTACGTA CGGTGGTGTG AGAGGGGCTA GAGATTATCC	2340
CCTACTCGAT TTTAAATCAC ATGACGTTC AAGGCATCAT CTGAAATCCC TTGTTCCAAG	2400
ATGAGTTTTC CCCATTCTTT AGCAGAGAAG AGGCTGTGGT CTTGTAGTT TCCGCAAGAT	2460
TCGATGGTTG TCCCTGGGAC ATCTTCCCAA GTAGTAGTTT CAGCGATTTC CTTGAGCGAA	2520
TCCTTGATAA CAGCTGCGAT TTTAGCACTG GTGTGACGTC CCCACATAAT CATGTGGAAG	2580
CCTGTGCGGC AACCAAATGG TGAACAGTCA ATCATGCCGT CAATGCGGGT ACGGATGAGT	2640
TTGGCTAAGA GGTGCTCGAT AGTGTGAAGG CCGGCAGTAG GGATAGAGTC TTCGTTTGGT	2700
TGCACCAAGC GAATATCATA ATGGGAGATG ATGTCCTCTT TTGGTCCTGT TTCTTCCCCA	2760
ATCAAGCGAA CATAGGGTGC TTTGACAATG GTGTGGTCAA GTTCAAACT TTCGACAATA	2820
ACTTCTTTTG ACATGGTAAA TCCTTTTCAGT TTTCTTCTCT CATTATATCA TAAAGGTTGC	2880
TCCTGAGACA GAGAGAAAAC CTCTCCGAGG CTGGAGAGGT TGAAATCTTT ACTTACGATA	2940
TAAGCGGTCG TATTGGTAGT ATGGGTCAAA GGTTACGTTG ATACCCAGTT TACGAAGGAC	3000
ATTCTTGTCT TCATCAGTCA AGATGATGGT TGAGTGGGCT TCGCTTCCTT TGAGGTTGCC	3060

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GAGTTCCTCC ATAGCGCGGG CAGCATCAGG ATTTTCTGTA GCTGTGATAG CAAGTGCAAT	3120
CAGGATTTCA TTTGAATGAA GCGGTGGATT GCGGCTACCG AGATGATCGA TTTTAAGACC	3180
TTGGATTGGC TTAACAACTT CAGGCTCGAT TAGTTTACT TCTTTAGCGA TGTCAGCTGA	3240
TTTTTTGATG CCGTTGATCA AGGCAGCGGC TGTAGGACCA AAGAGTTCCTG AGTTCTTACC	3300
AGTGATGATT TCCCCATTG GCAATTCAAA GGCTAGGGCT GGTCCACCAG TTTCTTCTGC	3360
TTTTTGGCGC GCAACGACAG CAACCTTACG GTCTGCAGGT GTGATACCGA GGTGCTTCAT	3420
GAGCAACTCA ATTTTCTTGA CGGCAGCTTC GCCAACTTTT TCAGCTTTGA AGTCAAGAAC	3480
TGTTTGATAG TAACGGCGGA TGATTTCITG TTTAGAAGCT TCGACAGCGG CCTCGTCATC	3540
TGTAATAGCG AAACCAACCA TGTGACACC CATATCTGTC GGTGAAGCGT ATGGTGATTT	3600
TCCGAGAATA CGTCCAACA TCGGTTTGAG CACTGGGAAG ATTTGATAT CACGGTTGTA	3660
GTTGACAGTG GTTCTCCAT AGGTTTGAAG ATGGAAGGGG TCAATCATGT TGACATCATC	3720
AAGGTCAGCT GTGGCAGCTT CATAAGCCAA GTTAACTGGA TGATGAAGGG GAAGATTCCA	3780
AACAGGGAAG GTTCAAAAT TAGCGTAGCC AGATTGATG CCATTGATTT GGTGCTGGTA	3840
CATATTGGAC ATACACGTTG CCAATTTTCC AGAACCAGGT CCAGGAGCGG TTACGACAAT	3900
CAAGTTGCGA CTGGTTTGA TGTAGTCGTT TTTGCCCATG CCTTCTGGGG AAATGATGTG	3960
ATCCATATCC GTCGGATATC CTTTGATTGG ATAATGAAGA TAAGAATCAA TTCCGTTTTT	4020
CTCAAGTTGA TTGCGGAAGG CATCTGCAGC GGGTTGGCCA GCGTATTGTG TAATGACAAC	4080
GGAACCAACA AAAATCCCTA ATTCATTGAA TTTATCAATC AAACGAAGAA CTTCTTGGTC	4140
ATAAGAAATG CCTAAGTCGC CACGTGCTTT GGAATGTTCA ATGTTGCTAG CATTAATGGC	4200
AATCACAACC TCAACCTGCT CTTCAATTC TTGCAAGAGC TTGATTTTGT TGTCAGGTTT	4260
ATAACCAGGA AGGACACGAG CAGCGTGGA ATCTTCTAAC ATTTTACCGC CAAACTCTAA	4320
GTAGAGCTTG CCGTCAAATT GGTAAATGCG CTCCAAAATA TGGTCGCGTT GTAAATTCAA	4380
ATATTGTTCA GAACTAAAAG CTTGTTTPTT CATTTTPTTA CCTCTGGACT CTATTATAAT	4440
AAAAAATTGG AAGTTAGGAA ACTACGAGC TAAAAAGAA ATTAAAAAGA TTAAGCAAAC	4500
GCTTGACAAA AATTTTAAAA AGTGCTATCA TAGACTATAG ATTATGAAAA TAATGAGGTA	4560
AACAGATGCA AGAAAAATGG TGGCACAATG CCGTAGTCTA TCAAGTCTAT CCAAAGAGTT	4620
TTATGGATAG TAATGGAGAT GGAGTTGGTG ATTTGCCAGG TATTACCAGT AAGTTGGACT	4680
ATCTAGCTAA GCTAGGAATC ACAGCAATTT GGCTTTCTCC CGTTTATGAC AGCCCTATGG	4740
ATGATAATGG CTATGATATT GCTGATTATC AAGCGATTGC GGCTATTTTT GGAACCATGG	4800

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AGGACATGGA TCAGCTGATT GCAGAAGCTA AGAAGCGTGA CATTTCGTATC ATCATGGACT	4860
TGGTGGTCAA TCATACCTCA GATGAACATG CTTGGTTTGT CGAAGCCTGT GAAAATACTG	4920
ACAGCCCTGA GCGAGACTAC TATATCTGGC GCGATGAACC CAATGACCTA GATTCCTATCT	4980
TTAGTGGGTC TGCTTGGGAA TACGATGAAA AGTCAGGTCA ATACTATCTC CACTTTTTC	5040
GCAAGAAACA GCCGGATCTC AACTGGGAAA ATGAAAAACT TCGCCAGAAA ATTTATGAGA	5100
TGATGAACTT CTGGATTGAT AAAGGTATTG GTGGTTTCCG TATGGATGTT ATTGACATGA	5160
TTGGCAAAAT TCCTGACCAG AAGGTAGTCA ATAATGGTCC TATGCTCCAT CCCTATCTCA	5220
AGGAAATGAA TCAGGCGACC TTTGGAGATA AGGATCTCTT GACAGTAGGG GAGACTTGGG	5280
GAGCAACTCC AGAGATTGCC AAGTTCTACT CTGATCCAAA GGGGCAAGAA TTGTCTATGG	5340
TCTTCCAGTT TGAACATATC GGTCTTCAGT ATCAGGAAGG TCAGCCTAAA TGGCACTATC	5400
AAAAAGAGCT GAATATCGCT AAGTTAAAAG AAATCTTCAA CAAATGGCAG ACAGAGTTAG	5460
GAGTTGAGGA CGGCTGGAAT TCCCTCTTCT GGAACAACCA TGACCTCCCT CGTATTGTCT	5520
CAATCTGGGG AAATGACCAA GAATACCGCG AAAAATCTGC CAAAGCCTTT GCAATCTTAC	5580
TTCTCTCAT GAGAGAACT CCTTATATCT ACCAAGGTGA GGAGATTGGG ATGACCAACT	5640
ATCCGTTTGA AACACTGGAT CAAGTAGAAG ATATTGAATC TCTCACTAT GCGCGTGAGG	5700
CTCTTGAAAA AGGTGTTCG ATTGAAGAAA TCATGGACAG TATCCGTGTT ATTGGACGTG	5760
ACAATGCCCG TACCCCTATG CAATGGGACG AGAGCAAAAA CGCTGGTTTC TCAACAGGTC	5820
AACCTTGGTT GCGGTTAAT CCAAATTACG AGATGATCAA TGTCCAAGAA GCGCTGGCAA	5880
ATCCAGATTC TATTTTCTAT ACCTATCAGA AACTGGTCCA AATTCGCAAG GAGAATAGCT	5940
GGCTAGTTCG AGCTGACTTT GAATTGCTTG ATACGGCTGA TAAGGTCTTT GCTTATATAC	6000
GTAAGGATGG CGACCGTCGC TTCCTAGTTG TGGCTAACTT GTCCAATGAA GAGCAAGACT	6060
TGACAGTAGA AGGAAAAGTC AAATCTCTCT TGATTGAAAA CACTGCGGCT AAAGAAGTAC	6120
TTGAAAAACA GGTCTTGGCT CCATGGGATG CTTTCTGTGT GGAATTACTA TAAATATTTT	6180
TTGCAGAAAA ATTTAAAAAT GAAATCGTAT AAAAACAAGG GAGGACTGTA TAAAAGACAG	6240
AAATCCTTTG TTTTTTATAA CCAAAGTTTA TAACTTTCA TTCTTGAAAT TCAATTAACT	6300
TTACAAATTC CCACATTTAA GGAGAAAGAA GATGAACATA AAGAAGCGTG TCCTTAGTGC	6360
AGGCCTGACT TTTGCATCTG CTTTGCTTTT ACCCAAATCA TTCATACCTC TCTCACTAG	6420
ATGTAACCTA CAAAACCCCT GACCTCATGA GCCACTTTCT TCCTCCTCAT GAGGTCAGTT	6480
TTACTTTCTG CTGTTCCAGT ATCGTTTTC CTCGCTAGAT TTCCTCAAAA GGCAGACTC	6540
CTCCCTTGGT GCGTCACAG ATTTTTCAT CTCGACTGTT CTTTAATGCA TCATTAACGA	6600

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CGCTTTTCTT CTAGGTGGTT CATAAGGAAC AGGAAGATTC AGTTGACTT TTCTAATCCT	6660
AGAATAAACT GCTGAAAACA ATTCGGAATA GGCATAGAGA CTAGACAATT TGAGGAGCTG	6720
CTTGCGTCCT GTTCGAACAC ATTTTCCGG	6749

(2) INFORMATION FOR SEQ ID NO: 85:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 1842 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 85:

TCTACCCATG GACTTTGAGG CATTCAATGT TCCATCTTCT AGTGGCGAAT CTTTGTATAC	60
AAACGATTCA ATTCACCTGG ATAGTGAAAC TCTCCCGCAA ACATTTTCTT GGTAACTCA	120
ATCCAGCTGA TATTTCTTTC AGCCAAAATA ATGGACAAGT TCTCCCAAAA TCGTTCAGCC	180
ATATTGCTTC TCCTTTAGTT AGATAAATAA TGTGTTTGGC CCATGTAAAT CAATTGTTTC	240
GTATCTCTTG GCAATAGAGC TCTAGCCTCT TCCAAATPCA GACTTGGATA AACTCGCTTA	300
TTTGAAACCG CAAGAGGAAG TCTGATGGTT AGTTCAGGAT TTTTAAAAAT TATCTCAACG	360
AAATCCGTTA ATCTTAGATT GTCACGGTTC TTAAATCGTA ATAAATTGGG AGATAAAAAAC	420
TCAAAACAAT CTGAAGAATA GCTCATCATC TCAATTAATT TGTCTTTGT CATTTCAGAA	480
ACTGAATGAC AAGATACCTC TATGCCATAG TTTTGGAAGA AATCTAAAAG AAGTTGATTT	540
CTTTGTCTAT TTTTACTTAG ATAGAGATCA ATCATGGGAG ACCTCCCAAA GATTCGGTTC	600
CATTTGATAT TCTGACACGA TTAAGGAATC TAATAAATTA AGGAATCTAA TAAATTTGCG	660
AAGTTAATCG GTTCTTGTG TTCATCATAA GCTTTTACAG TTAATTGGGT TGTAAGTATT	720
CCCTCTTTTC CCTCGGCTCG ATAGCCTTGT CCATATAAAA CAAAACGAG ATTTTGATGA	780
TCATCTACAA AGGCATCAAC CCCATTCTTT ATGTCTTGAC TTTCAAGGAA TTCCATAACG	840
TTTTGAAGAT AGGATTCGTA AAATAGTGGG TAGTTATGTT TTTTATGGTA ATCATCTAAA	900
AATGTCACTT CAAACTCACA TGGAGAGTAA TTTTGACTTT GAACAGCCTA AAAGTGCCAT	960
CAAATTTGAA TTGGAATAAA TCAAATAAAT AGCCCCATCC TCATCAATCC AACCTTTGCT	1020
CAAAGACAAC TCCAACCGAT CTTTAAAAAC TGAGTAAACC ACCTTAACCT CCAGTTTCAT	1080
ATTCTTATAC CGTTCACCTC CAAATAAAAG TTTGGGGAGC TTATAATAAC GCTCTGATGT	1140
CTGATATTGA TTAGCGGTAA TACGCTTCAT TATTGTCCCT CCAAGACTAA AATTCCAACA	1200

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TTTCCAAATT CATCAAATCG GATTAAACCT ACTTGTTCCA TTTCATCAAC TAACTGAGTT	1260
GCTTTTACCC AAATCATTCA TACCTCTCTC AACTAGATGT AACTTACAAA ACCCCTGACC	1320
TCATGAGCCA CTTTCTTCCT CCTCATGAGG TCAGTTTTAC TTTCTGCTGT TCCAGTATCG	1380
TTTTTCCTCG CTAGATTTC TCAAAAGGGC AGACTCCTCC CTTGGTGCGT CACACGATTT	1440
TTTCATCTCG ACTGTTCTTT AATGCATCAT TAACGACGCT TTTCTTCTAG GTGGTTCATA	1500
AGGAACAGGA AGATTGAGGT TGAATTTTCT AATCCTAGAA TAAAGTGCTG AAAACAATTC	1560
GGAATAGGCA TAGAGACTAG ACAATTTGAG GAGCTGCTTG CGTCCTGTC GAACACATTT	1620
TCCCACCACG TGAAGAAAAA GATGGCGGAA GCGTTTGATT GTTAAAGTTT GGAAGTCACC	1680
TCCAGCTAGA TGTTTGAGAA AAAGATAGAG ATTGTAGGCG ATACAGCTCA TCATCATACG	1740
AACTTCGTTT TTGATTAAAG TTGAATATC CGTTTATCG CCAAAAAATC CCTCCTTCAT	1800
CTCCTTGATG AAATTCTCGG CTTGACCACG TCCACGATAA AG	1842

(2) INFORMATION FOR SEQ ID NO: 86:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 19390 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 86:

TCATCTTTAT CTCCTCGAAA TTTTCTAATA TAGCCATTAT AACAGAATTT TGTGAAAATT	60
CCTATTATAG TAAATCACTA TTTTCAGTATA AAAAGAAAAA ACGAATCAGA CGATTGCTC	120
TTCTTAAAT CTGAAAATAG CTTTCCAGAA AGGATTAGCC GATTTTTTGC AGATTGAGCA	180
CTGCATCGTG ACTCATCAAG ACTTGACCAT ACTCTTGTA GACTGAGCGA CTGATATCAC	240
TATCGTCTGC AAACGCGCG ATACGGGCCA ACAGCCAAGC TGGATATGGG CTTGGATGAT	300
TTTCAATATC CACTAAAATG GTCAAATAAT AGCGCTCGTT CATTTTGTAG AGTTCAGAAG	360
TTTCCATTTC AAAAGTCAC TCTTGCGAA AAGCTACCAA GTCAGCCAAC TTAGCAAAAG	420
AAAGGATGTA GTAGATGTAA GCTTCTTTCT TACTCTCAGC TTCTTGTTCA GCCTGCTCTT	480
GCTCTTCTTC CTTGACTTCA ACTTGCTCAA GAGATTGAAT GGCTTCGATA TCATCCTTGG	540
TTTTGTCTGC GATGCTTTT TCCAGGGTTT TGATAAATC ATCTGGAGAC ATTTGAGCCA	600
ATTCTTCCAT ATCTGGCAAA TCCGATAAGT CTTCAAAATC TAGATTTTGG TCAATCTTTG	660
ACTTGGTCAC AAAGACATCT ACCTTATCAG GTTTTGGAGT CACACGGAAG CTCAACATGC	720
CTGTATCCAG AAAGCTATCA GGCATCTCTA GCTCATCCAA GATAGCATAA AAGAACTCTT	780

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CTGTTTTTTC TTGAGGAACG AGAAAGTCAG CAATCTCCAT TCCACGATCC ATCAAATCCT	840
CTAAAGATAT CGTGATTTTT AAAGTTGTAT CACTAATTTG TTTCATTTTC ATTGCTAGTA	900
ACCTCATACT TTCAGTTCTA TCTATTATAC TAGATTTTTC CGATTTTATC AAAAGAAGGC	960
TCCTCTATAC GGATAGATTT TCCCTAGGGT CTTTCTATAG GAGACTCCAA AAGAAAATTT	1020
CTGCAGACAG ATAGAAAAAG CCTTCAAAAT CGGCTAAGAG CCGACTTTGA AGACCTTATA	1080
CATCAGAATA CTTATAATTT AAAGGTTGCT ACACCGAGGA TAGAACGATT TAAGTTTCTG	1140
AGAATTGAA GACTTTGCTC AAATTCTTA TAACGAGTCA CTCCGTACTC TTCAACAAGA	1200
AGGACTGTAT CTCTTTCCAA AAGAGATGAT ACATCCTGTA AATCTACAAA ATGCATTCCT	1260
TTTAAAGCTT CTGACTCTG TTTCAATTTA TCTAAGATAG CTTTATTTGA GCTAACGATG	1320
GTCAATTCCT GTCCAGTATT TTTGTATGAC AAAACATCTG CTAGGTTAGC AATTGTTGTA	1380
ATCTCTGTTA CAAAATCAAT TTGATACTGA GAAAAATCAC CTACTCTATT GATTGTTGGA	1440
TTAAAGAGAT AAATAACAC ATTTCCCATC ACAACCAAAA TCACACAAAC CACTCCAATA	1500
ACAATAAAC GAAGAAACAG ATTTTTCACA TTTAAGCCAA GCGCTGTTTC ACCATTTGCG	1560
TTCAATTCTT TAGAGTTGAT GGTTCAGT TTTTCAATTT TCACATTTGC ATAGGCATGT	1620
TTAAATTTCT CAATCAACCC ATCAATTTTT TTCTCTAACA AGTTATTGGC ATCTTTACTT	1680
GATGTCAAAA TTTTCACACC AACCCCTGCA TCGTCAATCA TATAGTAGAC GGTCAATTTT	1740
TTCCACCAAT AGTCATTCTG TGAATTTTTC AAGGTTGTTT CTGTCGTGTC TAATTCACGT	1800
GCAATTTTTT TCAACTCACT GGGTTCTACA TCATTGAAAA GATAAGCTCC ATTCAAATTA	1860
CCATCAATCA ATTTCCCATATA AAAATCACTA TAACCACCAA TTTGATGATT CAAAATCGTT	1920
TTGTCCGACT CTTTGGAGG AGTGATTTTA TAGATAAGAT AAGTTGAATA ACTGTTGTA	1980
TCTTTGACAG TGTTTTTATT CCTAACTGCT TTAATTGTAA ATGGTACAGC AATGAGAGCA	2040
AATAAAGCGA TGAGAGCTAA AATATTTGCT TTTCGCTTTT TATAAAGATT TGCAACAAA	2100
TCAGCTACTG AATAATGTTT AAACATGATT TTTTCTCCTT TTGTTTAGTA GATACTAGTT	2160
TTCCTTTGTA AGCATTTTGT CTACAAATAT AATCACAAGA ACAATTCCCC AGAATTGCAT	2220
TGTAATAAAA TTGAAGAAAC TTTCTGAAAA GCTGCTTCTT GGCATAAAGA ATAGATTATT	2280
CAAGATGAGT AGGGATAAAG CAAATAGGAT TGTCTTGAG CGATAGGCTA CTTGCAGCAT	2340
GGCTATAAAT AATACGCCGA GTAAGAACT AAGCAGAAAG ACTCCAATCA TACCATAGTC	2400
GGTATACAAC TCCATGATAT AACTACTTCC GATACCATGC CTTTCAAGT ATTCCTTGTT	2460
CAAGACAAGA TAGGATAGAT TGTGGGCATA ACTATTACTA TCAATAGCTA GTTCCACACT	2520

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ATTGGTTGTA TGTTCAAAGG CTTTTCCTCC GAAAATGGCT CCCAAACTCC CCCTTGCAAA	2580
ATAATCAAGA ACAGGACCAA AAGTAAAATT ACGGAAATCT CGGTAAGGGA GGCTACTGTT	2640
AAATAGAAAA CCTCGAGCCA GAACACCAAA ACTAGTCCCT TGTTTATAGA TAAAGTCAAG	2700
TAAGATATCC CAGAAACCTG TATGGGAAAC TTGGACATTA TCCCGTACAT AATTGAGTAC	2760
TCCCATCGCT AACATGAGAA TAGGAGAACC TACAAAAATC GCTAACTTTT CTTTAAACCC	2820
AATCCATTTT CCTTTTTCAG TTTGCTCCCG CATAAAGTAA TAAACAAAAG CAAATmAAAT	2880
ACTTAAAAATA AAGGGATTTC GTGTCCCAAT TGCCAAATGA ATAGTATTAG CTGCAATAAA	2940
GGAGACAAGC ACTGCTGTGG CCTGCAATTT CTTTGGCTTG GTTGCCAGAT ACATACACAT	3000
TGCATAGACC GTAAAGGTAG ACAAAATGTA GGTAAATAA GGCAGTTTAC TTTCAAAATT	3060
TGCATAGTAG GCATAGTAGG AAGTCTGCAA ACGATACAAG AGCCGTTCAG ATAACCGAAT	3120
GAAATAGAAA GGATAAGTTA GAAGAAAAAC TCCTAGTGAT ACAAAGCGTA ACCGCTTGAT	3180
ATAAACCTCT TTTAGAGAAT TTCCTATATT TGCTACTTTT ATTTTCTTCC TAGCTATGAA	3240
GTAACGAGCC AGAATGCCCTC CTGTGGTCAA GCCCAGAATC GAAATCATGA CAACTATAAA	3300
GGCAAAACGA TAGGCTATTG GATGATAGGT ATCCAAAGCA CCATCCCTAA AATAATCAAT	3360
GGTCGGTCTT GATACCAGAA ATACAAAAAT GGTAAATAG AAAATAAAAT GGATTAAGTA	3420
ATACTTGATA TCATTCCAAC AAGCAATTA GCTACTAACC AACAAGAACA ATAAAGTAGA	3480
AAGTAAGCTA ACATTATTAT TATTAAACAG ATACACAATT CCACTTACTA GCGTCAAGGC	3540
ATAACTGACT ATGGTCAAAC TAAATAATAA TCGTTTCCCA TCAATCACTT GGTCAACCCC	3600
GTTCTAATGT AATTTTTTAG ATTTTCAAT ATTTTTCAGT AATAAGAATC GATATAAGGA	3660
AATATTTATG AATAGGGCCA AAGCACTAAT TCTTCTCCCC TTACGGAAAA TTGGATTCCCT	3720
AGAAATAGCA AAGGCATGGC CTTTAAAAA ACGATGAATC TGAGAATAGG CTTCAAAC TG	3780
TTTATACTGA TCATCTAGCA ACATCTTATC CAGAATAAAG AAGTGGGCAT AGGCCAATCT	3840
GAAAAAAGCG ACCTCTTTCA AGTCAGGATA GTTTTTCACA ACTTCATTAT AAAACTTTTG	3900
GTAGATATCA ATATAGGCTA AATCCTTCTC TGCATAGGGT TTGGTCGTAA TACTATCCCC	3960
TCTATGGAAA TAGTAATAAT AGGGTTTAGT ATTAACCACA TACTTCTTGG CCAACTTGAT	4020
TAAATCAAAA TGGTAATAGG CATCTTCGTA AATCAACCCC TTAGGAAAGG ATAGGGCAGT	4080
TGCAATCTGT CTCTTGATTA GCTTATTGCA AATCGTCCCA GGTATTTTTT CACCTATGAG	4140
GTATTCCTTT AGAAATGTTT GAGAATCACA GACAAAATAG TCATCCTGAT TGGCTGACTG	4200
TGGGCTTTCA TCATTAGCAT AGACATTCAT GACACCACAG CTCGAAACAT CCGCATCTTC	4260
TTGAACTAAT TGCTCATATA AGCTCTGAAT CATTTCTGGA TGGATATAAT CATCTGAGTC	4320

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AATAAAATC AGATAATCCC CGTGAGCCTG CTTTCATCCCA TCATTTTCGTG CTTGCGACAA	4380
TCCTTCGTTC TTTTATGAA GCACTGACAC CCTGTCATCT TGTTCAGCGA TTGAATCACA	4440
CAAGCGACCA CTTTCATCTG TTGCACCATC ATCAACAAGA ATAATTTCCTA GATTTTGATA	4500
GGTCTGCTTC TGAATGGAAG CTATCGATTT TTCTAGGTAC TGCGCCACAT TATAGACTGG	4560
CACAATCACA CTAATTAATG CAGTTTCCAT GCTACTCCTC TAATAGTTTT TCTACTTGT	4620
CGATTTGTTT TGTAAATGTA AATTGTTGAA TGAATTGGCT AGCCTCATCG ACATCAAAGT	4680
TTGAGGCAGA AGTCATGTAA TTAGTAATCG CCTGAGCTGC CTCTTGATTG CTCTCAATGA	4740
TTTGTCCAAA TCGTCCTTCT TGGGATAATT CCTCAGCCCC TCCAACGTCC GTAGAGATAA	4800
AAGGGAGTCC CAGACTCAAG GCCTCCACAT AACTCCAGG AAAACCTTCT TGTTCAGACA	4860
TAGACAAAAG AACTTTCGTC TGAGATAGAT ACTGATAAGG ATTTTTTTGA TAACCAAGGA	4920
AATGTACATA GTCCTCAATC CCATCTCTT TGAATCGTTT TTTCAGTTCC TCTTCCATAT	4980
CACCAGCCCC GATAAAATAG AGATGATAGT TTTTCCCTC TTGGTGTAAT AATCGTATCA	5040
CTTCCACTAC ACGGTGAGAA CCCTTATTTT CCTCAATCCG TCCGATAGTA CAGATACTTT	5100
GAGGAGCAAT CTCGATATCG ATCTTCTCTT GAGATTTTTC TAGAATAGTC TGAAAATCAT	5160
ATCCATTGTA GATTGTCTGT AATTTAGAAG TATAATCTGG ATAAACTTCC TTGATAGAAT	5220
TGCTGGTCTT TTTTGAAATC CCTACAATTG TATTCGCAGC ATCCAACTGG CTCTATGTG	5280
ATTCTCTTTT AGAGCTATCC TTAAGAAGTT CTTCAATACT TCCATGAATC CAAGATATCT	5340
TCTTGACTTC TCTTCTTTTA GAGAACAACA GTGGTGGATT CATAATGGTA AAAGAACTT	5400
CAACATCATA ATCATCTTTT ACAAGCAAAC GACGAGTCAG TCTTGGAATA TAAATCTCA	5460
TTCTCCACAA AAAAGCTCGT AACCATCTGG TTTGGCGATA ATCTTGAAGG GATTTTAAAA	5520
TGCGTACATG CTTTGGAACA GATTCATATC CCTTGTCAA GTGCTCCATT TCAAGAATAT	5580
CAATATCATA CTTTCTGGA TCCAGATTG AAACAATGGT TGATAGAATC TTCTCTGCAC	5640
CACCTCCAAG AGAAAAAGAC CACATAAAAA ATAAGATTTT TTTCTTAGCC ACCATATCT	5700
CCCTTGATTT CTGTATAAGA CTTATCCATA TCAGCGATGA CAGCATCATG ATGCGGTACC	5760
TGCTTGTCTG CTGGTGGAGG CGTCATATAA TCCCCAAAAG CAGTTCTGAG ATAGACATCA	5820
TAGCCGATTG GAATAGGCAT CTCTGTTCC TCAAATGGCA AGAAAAGATT GTCTTCAAAA	5880
GATGTGATTG GGTACTTGT TCTCATGTAG CCAGGACCTG AGCATAATTC TGTAAATGCCA	5940
TCACAATCAG CCAAATCATA CTTAGTCATT TCTTCTCAG CTTTTCCTCA GATGCGATAA	6000
CGGAGAGATT TTGGAGTCAA ACCCAGTAAA ATGCGACTTC CCCATTTTCA GAGATCACCA	6060

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TGCTTTTCTG GAATAGTTTG CGCACAAAAG AGTGAATAAA TCAAGGCCCA ACGAACCTGT	6120
TTTTTCCGCT CAGCTGGATT TTTCGGATAA TAATCCAAAG GCAAAACATC CAAGGCCAGA	6180
CCATGTGGCA AATCCAAATC CTGCTGATAA GGCTTGATAC AGGTGGTTTT CTGTGCACGA	6240
ATGGTAATAA AAAGATTACG ATCAACAAAA TCCTTGTGAC TCTTTGACAA GAAATAACGT	6300
TCATCTGCAT AACGAGGCCA TAATTCTGCT AATTCTCAT AATCTTTACG AGGCATAAAA	6360
AAGTCTAGGT CGTCGTCCCA AGGAATAAAT CCCTTGTTTC GAAGGGCACC AATAGCGCCT	6420
CCGCCACAGA GATAACAGAG CAAATCATGT TCTTTACAAA AGGCCACAAA ATATTACGCC	6480
ATCTCCAGAC TACGAGCCTG AATTGCTTTT AAATCAGTCA TATTGTTCAT TATTCTTTCT	6540
ATCGTATCGT TTCATTATAC CACAAACAAG GGGTGAAAAT CTATTGCAGA CTGTAAAAAA	6600
TCAAAGCCTG ACTGCTATCC AAATAGCTAT CAAACTTTGA TTTTCTGTC TTATACTCTT	6660
CGAAATCTC TTCAAACCAC GTCAGCTTCA CCTTGCCGTA GGTATAGGTA ACTGACTTCG	6720
TCAGTCTTAT CTACAACCTC AAAACTGTGT TTTTAGCAGC CTGCGCTAG CTTCCTAGTT	6780
TGCACTTTGA TTTTCATTGA GTATTATCTT ATCTTAAGCC CATTGAGCG AGCTTGGTTT	6840
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GACCGATCAT CATGAGATAA GGAAGGAAAG CACTTGTAAG AAGCACTGTA ATCAGGCCAG	18540
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AACAGATGAT CATCAAGAGA CTGGAAAAAA TGTAAGAACT TAAGACTCTA GCGGAAACAT	19380
TTACTTTTTT	19390

(2) INFORMATION FOR SEQ ID NO: 87:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 18436 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 87:

CCGAGCGTCG TTACAGACTT TATCAAGATT GGACGCAAGA AGAAATTCAA CATATAAAGG	60
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CCTACTCTGG TTCTGCCATG CAATTTGGCG ATAATTATT CCTATTTTAT ACAGGAAATG	360
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CTAGGAATCG AAGACTACAA TCGTGTGACA GCGCCGATTA TTTCCTTTGA CCGAAACCTA	1860
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CGGGAAAAAC CAGATGCCAT TTTTGCTTCG GATGATTGA CAGCTATTCT GGTCAATAAA	2160
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GGGCACGTTT	TGCTTCCAAG	15780
ATTACGAGTG	AATATTTTGA	15840
AGGAACCTTG	TCGAGCAAGG	15900
TATCAATAGA	GGGTTTAAAC	15960
ATCATTTGCT	TGTACCTATT	16020
TTCTAAATTT	TATCGGGTAG	16080
TTGGAGATTT	TGGTAACATC	16140
TCCTGATAGT	GACCAATGAC	16200
ACGATCCACA	CAGAAGTGTT	16260
CTGCTTCAAT	CACACATTTG	16320
ACACGTTTCAG	CAGCTAGGGG	16380
TACCTGATCG	TTGACAATCG	
CATAATCATA	CTCAGCATG	
AGGGCAATTT	CTTCCTTGGC	
CTTTTCGATT	CGTTGGGCAA	
TCACTTCTGC	ACTATCTGTT	
CCACGACCTA	CCAAGCGATC	
TTGCAATTCA	TCCAAATCTG	
GTGGTGTCTAG	GAAGATAAAG	
ACAGCATCTG	GAACCTTTTT	
CTTGACCTGA	AGAGCACCTT	
GAAGATAAAG	ACATCGATTC	
CCTTGTCCAA	GGTTTCATTG	
ACATAGGTCA	GAGGAGTTCC	
ATAGTAGTTA	CCGACATATT	
CTGCGTATTC	CAACATCTGT	
CCTTGACGAA	TCAGCTCTTC	
AAATCTCTCA	CGAGTACGGA	
AGAAATAGTC	AACACCGTCC	
ACTTCTCCAG	GACGTTGTGC	
GCGTGTCTGC	ATCGATACAG	
AATATTGAAA	TTGGTTTTC	
GAAGATAAAG	AAATCTCTCT	
TCTAACCCTT	CCTTTTCCAA	
CCCCTGAAGG	ACCAGAAAAA	
ACGATTAGTA	AGCCTCGGTC	
TGCCATTGTG	TCTCCTTTTA	
GTCAATCTGT	GAAATAACAT	
TTCTCTAGAA	TAATGGCAAA	
AAGCCAGATT	ATCCTTTACA	
GTCTTTCTAT	CTAGTGTAAAC	
AAAAAAGCAG	TAATTTTTC	
ACTGCTCTTT	CTTATTTATT	
TAGCATAATC	TACTCCACGA	
AGCTCGCGAA	TCACGGTTAC	
CTTGATATTT	CCTGGATAAT	
CGAGATTGTT	TTCAATTTTC	
TTACGAACTT	TGTGAGCCAA	
GATTGTGACT	TTGTCGTCCT	
TGATTTTTC	TGGATTGACC	
ATGATACGAA	TTTCACGTCC	
TGCTTGAAGG	GCAAAGCTAG	
TTTGCCTCC	TTCAAAGCCG	
TTAGCAATTT	CTTCCAAATC	
ATGGAGACGC	TTGATGTAGC	
TTTCAAGAGA	CTCACTACGA	
GCACCTGGAC	GGGCTGCGCT	
CAAGGCATCT	GCTGCAGCGA	
CGATAACTGC	TATCACGCTC	
TCAGCTTCAA	CATCTCCGTG	
GTGACTAGCA	ATCGTATTCA	
CCACAACCTG	GGGTTCCCTG	
TACTTACGGG	CCAATTCAT	
ACCGATTTC	ACGTGGCTAC	
CTTCAACCTC	ATGGTCAATG	
GCTTTCCCGA	TATCGTGAAG	
GAATCCAGCA	CGACGGGCAA	
GAGCCGCATT	TTACCAAGT	
TCGCTCGCCA		

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TGATACCAGC	CAACTTAGCA	ACCTCAATCG	AATGGCGCAA	AACATTTTGT	CCATATGAAG	16440
TACGGAACGTG	CAAACGTCCC	ATAATCTTCA	TCAAGTCTGG	ATGAAGGTTT	GGCGCACCAA	16500
TTTCATAGGC	AGCAGCCTCA	CCGTATTAC	GAATCTTATT	GTCAATCTCT	TGACGGTTTT	16560
TCTCAACCAA	CTCTTCGATA	CGAGCTGGAT	GTATACGACC	ATCTTTGAGC	AACATTTCCA	16620
TAGTCATACG	GGCAATCTCA	CGACGAATCG	GATCAAATCC	TGACAAGGTC	ACCACTTCTG	16680
GTGTATCGTC	GATAATCACA	TCGACCCCTG	TCAAACTTTC	AAAGGTACGA	ATGTTACGAC	16740
CTTCACGACC	AATAATGCCGT	CCCTTCATAG	TATCGTCTGG	CAGATGAACT	GTTGAGTTTG	16800
TTGACTCCGC	TACATATTCA	CCAGCGATAC	GTTGCATAGC	TTGAACCAAG	ATGTCCTTGG	16860
CCATTTTGTG	AGAACGTTC	TTGACCTCTT	GCTCAGCTTC	GCGAATGCCA	CTGGCAATCT	16920
CCCTGGTCAA	GTTTTCTCT	GTCTGAGCCA	AGATAATATC	TCGTGCTTCT	GCCTGAGACA	16980
GCGCACCAAT	ACGCTCTAGT	TCTGCTTCTT	TTTGTCTTTC	GACTTCCTCT	AATTGCTCTT	17040
CACGCGCATC	AAGGTTTTTC	GCTCTATCAG	AAATACTTTG	TTCTTTTGT	TCAAGTGTTT	17100
GTCTTTTACT	CGTCAAATG	TCGTCCTTAC	GGTCAAGGCT	AGTAGCTCTC	TCTGTCAAAC	17160
GACTTTCGAT	TTGTTTGAGT	TCTTGACGTT	CTGATTGAA	TTCAGCGTCC	ACTTCTTCAC	17220
GGTATTTTCT	GGCTTCTTCT	TTGGCCTCCA	ATAGTGCTTC	TTTTTTAAGA	GACTTGCTTT	17280
CACGTTTGGC	TTCATTAACA	AGTAAATCCG	CTTCACGCTC	AGCTTGTCCA	CGTAAATTAG	17340
TTGCTTCTTG	TTCAGCATTT	AAAAGCATCA	ACTCTGCAGC	TTCTTGAGAT	GATTTCATCT	17400
TAGCTGAGAT	GCTGACATAT	CCAATGACTA	AACCAATGAT	GACGGCAAAA	ACAGCAATCG	17460
CAAGCGACAT	GATTTCATG	TTTTTACCTC	ATTTTATTGT	TATCCGAAT	GACATACATT	17520
CTTTTACATT	CTACCATAAA	AAAGTGATTT	TCACAAACCT	AAAATAGAAT	ATGTTTTGAG	17580
GAATTTGGAA	CACATTTACC	AAAATAAACT	TGTTGTTTAG	AAATAGTAGT	TTAGTAGAGA	17640
CTTGAGAAAA	AGCCTACCTT	TCAATAGACT	TAGTAATGAT	CTTTAAAGGA	CAAGAAAGCC	17700
ACGCTATCTC	CATCCATCAT	ATAAATCAAG	CGATTTTCTG	CATCAATACG	CCGTGACCAG	17760
GCTCCTTGGT	AATCATATTT	GAGTGGTTCT	GGTTTACCTA	TTCTGTAAA	GGGATCACGT	17820
TGAATATCCT	TCATTAGTTT	ATTGATTCCT	TTTAACGTTT	TCTTATCCTG	ATTTTGCCAG	17880
TAGCAATAAT	CTGCCCAGGC	ATCTTCTGTA	AACCTGAGCA	GCATTTCTTA	CTCCTCAATA	17940
ACATGGACCT	GAGTACTTCC	AGCACGAAC	TGAGCCATTC	CTCGCAAAAC	CTTATCAGAA	18000
AGTTCCTTAT	TTTGAGCAAT	TCTCAGGGTT	TCTTGATAC	TATCCCACTC	ACTCTTTGAA	18060
AGGACTACAA	TGTCCTCATC	TGGATTTTTA	TTGACCACCG	TCAAAGGCTC	AAATTCATCA	18120

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TTTACCTTCT TCATGTAGTC CTTTAAATGA TTTCGGAATG TTGAGTAAAG GACTGCTTCC	18180
ATAACCATAC CTCGTTTCTAG CTCCTTTTCCA CTATTATACA CGAAAAGAAA GAAATTGTCA	18240
GGAACCTGTA CAAGATTTTC TTTTCTATCT ATTTATACTC AATGAAAATC AAAGAGCAAA	18300
CTAGGAAACT AGCCGCAGGC TGTACTTGAG TACGGCAAGG CGACGTTGAC GCGATTTGAA	18360
TTTGATTTTC GAAGAGTATT ATTCGTAAAA AATCTCAAAA AGCCTACCTT TCGGTAGACT	18420
TAGTTGTTT CTATTC	18436

(2) INFORMATION FOR SEQ ID NO: 88:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 7001 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 88:

ACGTAGAAAA ACTATTCTA TCACAGATAA TATCCGTAT GTTGTGGAG GTATTGAAAT	60
AAACGTCCTA GGTATCTTTC TCAGTCTATG TGACTTACAA GGGAAAACCTC TTTCGAGAC	120
AGAAATTTTG AATGAAGATT ATCCTATTTC AGAAATCAAT TCCACCATTA CCAATATGAT	180
AAAAACAGCT ATAGAGTACG TCCCTTTGGA AACAAAATTA CTTGGATTG GCTTATCAAT	240
ACCTGGACAT TATAACAAAG ACTCCGAAG TATCATTACA AACACCCCA TATGGGAATC	300
TTTAAATTTA TTAAATGTAA TTAAAAGATT CAATTTTCCT TTTATTGTAA AAAATAATAT	360
CGATTGTATG GCTATAGGAC AATACCTTTT TAATCCACAC AATACCCCG ATAACCTTAT	420
TTTCCTACAC GCTGGATTAG GTATTTACAC TTCCTTTTTC ACAAAGAAA AAATAGGAGC	480
CTCTAAAAAT CCTTATATCG GAGAAATTGG ACACACCATT GTCGAATTGA ATGGGCAATA	540
TTGTGAATGC GGAAAAAAG GTTGTTTTACA AACATATATT TCGGATGCTT GGTAAATCAA	600
ACACGCCCAA TTATTATTTA AAAATTCCCA ACTAACTGTA CTAAGAGCC TTGTAAAGAC	660
TGAAAAAGAC ATTCATTTAG ACACCCTTTT AACGGCTTAT AATTAGGCG ACTCCGCTTT	720
ACGTCAACAA ATTGATAAAG GAGTCAATTT ATTAGCCACT TCTATTGCAA ATCTCCTCCT	780
CATCAATCCT GCTGATAAAA TCTATATCAA CAGTCAATTG CTTAATTATC AACCTTTCAC	840
TCATGAAGTC AGGGATAAAA TCCAAGACCA GCTCCACTTC GTTCCCTTTA CTCGTAATAT	900
AGAAATTGAA ATTTTACCTT ACAACAAACA TCGTGGAAGT ATAGGAGCTT GTGCATTAGC	960
TATCGTCGCT TTTTTCATAG AACATAGCAA TGTATTACAA GATATTATTT CACCTTAATA	1020
TATTAGAAAT CTATAGACCT GTTTAAATCA ACTATAACCT CTAGTAGATA TCTCGTATTT	1080

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AGACAATATG AAAACAAGAC GACTTCCATA TAGGAAACCG CCTTCTCGCT ATGTTGAGTG	1140
ATTTATATTA AAATAACTTT TCTTCTAGCT GCATTTTATT ATTATAAAAA CATTCATCAT	1200
AACCCCCAGA ACTTAAATAA CAATTTTAT TCAAGATACA TACTCCTAGA ATAACTTTA	1260
TATGAAATTC TCATTTTGT TTTTACAATT CTCCTTAGTT AAATCTTGTT TAATATATGT	1320
TTTACATATA GTATTTAGCG CCACATAGTA CTGAACCTCTC TCCAAAAACG GTTATTCCTC	1380
TTTGAATAGG GCGTTATCAC AAGAAAAGCA TCTCCACGTT TCAACTTCAT ATGGCTCAAA	1440
AACAATCAAT TGATGCTAAA ACCTGTACCT AGATGTTTCG GTTCATAAAA CCATGAAACT	1500
GTAAAAGTGG ATGAAATTGA TAGCGATAGT CAAATCAAGA GGCATCATAA CTCTAAAAAG	1560
TCACAATATA TAAGTTCATC CTCGGAAAAA TATCATTCTA ATTGTTGAAA TGCCTACATG	1620
AAAAGAAACG TCAAATGCTC ATGAAACAAC GAATACAGGT ATCAAAACTA TGACAAAACA	1680
AATCCCTAAA TTTACTAAAG AACTTGCTCA ACTTTACACC TGTAAATGGT TGTGTATAA	1740
TAAAGTTACA AAGATGTACG ACCACACTGT TGTAAATCAT AGTGTTCGCG AATATATTAC	1800
TGATAGCATT TCTACAAATA CAAGTAAAGA GAGCGGATGA GATTCAAACG AAATATGTCA	1860
GTGCTTTGGC ATTCCTAGCC TTCATATCAT TTAAAGAATT CTATAGACAA AATTTTTTCC	1920
AATACAGACA CTCGTAACAA CTGCTTCATT TTTCTACCAA CATATTTAGG AACAGGATAA	1980
GATACAAGAG TATTAATCCA TAGCTCAGTT CTATACCAAT CTAAGACAAA TAAGCTAAAA	2040
AAACGATTGA TAATAAGCAA ATAGATTCCA AATTTTCTCT ATCTGCTCAT TTTAATAAAC	2100
AATACTAGTG TAACTATCCT TCCAGTCAGA AGCTTGTCAG ATCACACCGA AAATCTTCT	2160
AAAATTTATC TCGTTAGGCA ATCAAGCAAA AACTCGACGA TAGTACAAAC ATTATCATAC	2220
AGGATTGACT TCCTAAATTA TATACTTTAG TAAGGTTTTC GGATAAGAAA AAAGTTCAT	2280
TTTACATTTT TAAACATTCT TTTCTAAGAT GAAAAACAGA ATTMTTCGAT TGTGATTTAA	2340
AGCAACAAGA AGATTTTCAG TATCATCCTA TAGATACGAG CTAATTAAGA AAAACTACAT	2400
TTTTGAATAT AACTACAAT AATATAAACT AAATTTTATA GGAGGAAGAC AATGGATTGG	2460
TACGATTATA TGATACAGGC ATCCAAACAA TCACAATTC ACGCAAGCCA TTGGTTTCGC	2520
TATTTGCGAA AAGTTATTTT TGAAGACTAT TCTTATTTAA CAAACCAAGA TGTAGAAAAG	2580
TTGCTAGACT CCAAAGAACT AACCCGTTTT CAAAAAATTA GCTTGAAGTA TGCCTTTCAA	2640
GAGCATACTC CAACTCATAA ATATGTGATT TCATTAAATA AACCTGCTAA GTTAACCAAT	2700
GTTCAAAAAT TGATGGAGAA ATACAAACAT GGATAAAATG AAACCGGTCT TCCAAGCCCT	2760
AAATAAGGAA TTAATTCAGG AAAATCTGAC TTAAACAATT ATCTGTGTCG GTGCTTATGT	2820

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CTTAGAATAT CATGGTTTAC GTGCCACACA AGATGTTGAT GCTTTTATGG CTCTATAATA	2880
TTTGTAGTGG GTAAATCCCC TATGGATATT ATGGAGCCTA TTTTGTGTA GAAAAAAGT	2940
CCCATATGAC CTATAATGAA AAGCGACAAA ACAACTCATT AGAAAGAATC ATATGGAACA	3000
ATTACATTTT ATCACAAAAT TACTAGACAT TAAAGACCCT AATATCCAGA TTTTAGACAT	3060
CATCAATAAG GATACACACA AGGAAATCAT CGCCAACTG GACTACGACG CCCCATCTTG	3120
CCCTGAGTGC GGAAACCAAT TGAAGAAATA TGACTTTCAA AAACCGTCTA AGATCCCTTA	3180
CCTCGAAACA ACTGGTATGC CTTCTAGAAT TCTCCTTAGA AAACGCCGTT TCAAGTGCTA	3240
TCACTGTTCA AAAATGATGG TCGCTGAAAC TTCTATCGTC AAGAAGAATC ATCAAATTCC	3300
TCGTATTATC AACCAAAAAA TTGCGCAAAA GTTGATTGAG AAGATTCTA TGACCGATAT	3360
TGCTCATCAG CTGGCATT TCAACTCAAC TGTCAATCGC AAGCTCAATG ATTCTCACTT	3420
TGAGCATGAT TTTTCGCGTC TTCCTGAGAT TATGTCCTGG GACGTTGAAA CAGTCCGGGG	3480
AGTGACTGTT TCAATCGGGA GATGGAGATG AGCTTTATTG CGCAAGATTT TGAAGGCTC	3540
GATATCATCA CTGTTCTTGA AGGTAGAACA CAAGCTGTCA TCCGAGATCA CTTTCTTAAA	3600
TATGATAGAG CCGTCCGATG TCGCGTCAAA ATTATTACTA TGGATATGTT TAGTCCTTAC	3660
TATGACTTAG CTAGACAACT TTCCCGTGT GCTAAAATCG TTCTTGATCG CTTTCACATT	3720
GTACAACATC TTAGCCGTGC TATGAGTCGT GTGCGTGTC AAATCATGAA TCAGTTTCAT	3780
CGAAATCCC ATGAATACAA GGCTATCAAG CGCTACTGGA AACTCATTCA ACAGGATAGC	3840
CGTAAACTCA GCGATAAACA TTTTATCGC CCTACTTTTC GTATGCATTT AACCAATAAA	3900
GAGATTTTAG ACAAGCTTTT GAGCTATTCA CAAGACTTGA AACATCATA TCAGCTCTAT	3960
CAACTCTTGC TGTTTCACTT TCAGAATAAG GAACCGGAGA AATTTTTCGA ACTTATCGAG	4020
GACAATCTTA AGCAGGTTC TCTATTTTT CAGACTGTCT TTAACCTT CCTCAAAGAT	4080
AAAGAAAAGG TTATCAACGC CCTTCAACTA CACTATTCTA ATGCCAACT GGAAGCGACC	4140
AATAATCTCA TCAAACTTAT CAAGCGCAAT GCCTTTGGTT TTCGAACTT TGAAACTTC	4200
AAAAACGGA TTTTATCGC TCTGAATATC AAAAAAGAAA GGACAAAATT TGTCCTTTCT	4260
CGAGCTTAGC TTTTTCCTT CCACTACAG TTGACAAAGA GCCGAAAAA GGAACAGCCT	4320
TAGCTTTCCT TTCATTTCTT TTTATTCCC TCGTAGTAAA CGTGCTAGCT TCCACAAAAC	4380
AAACAGGATT CCCAGAAATG CCAGTACCAC TAGCCACGG TACAACCAT GAGAGGTTGC	4440
AACACGCGAT ACAGATTGTC CTTCTTTCGT AAAAGCAACC CTCGCACTG CAGCTGTTTG	4500
TGGATCTGAT TTTTGATAAA CAGCGACTCG TTCAAAATTC ACTAATAAGC GTTTATTAAA	4560
GGTAGGAATC GGATCGCAGG TTATCAAGGT CATGATATTT TTAGAGCTAA CCGATTCTAA	4620

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TTTTTCCCAT TCCGACGGTA AAATAATCTC TGTGTCCATC ATCTGATATT CTACAATTTC	4680
CTGGCCATTA TCATAATAAA GAGCATCTCC AACTTTTAGC TGATCCAAAT GGCGGAAAAA	4740
GACATGGCTT GGCTCTGCAC GGTGCCCAGC AATCACTGAG CGAATCCCTG TACCATCCAG	4800
AGGCAGCGGT GTACCATCCA CATGAGCCAA GCCCATCCCT AAATGATGAT AATCTGCTCC	4860
CAAATAAACC GGCTCCATGA TTTCCAAACT TGGAAATAGAC AAGTAACCAT AGACTGCATC	4920
AGGGTCGTCA GACACTTGGT AATTGACCTC ATATCCCTCC GCCAAAAAG GATCTACAAT	4980
GCGATTTTGC GAAGCCAAGC GTTGATTGTA GCGGAGAGAA TGGTTCTGTT GTTCTTGGTA	5040
CATTTCAAGT GTCATGGATT TCACAAATGT AGCATGACCT TTCACCTGTC CAAGAGACTG	5100
CAACACCATC TGTCCAAAAC AATAAATAGG AATCAAACAG GCTACCAACA TCAACAAGTA	5160
TCCCAATAAG GCTCGTAGTT TAGTCCTGA CATGACGCCC CTCCAATTGC TTTTCTAGTC	5220
CTTTGACAAT CCGTCGATTA CGATACACGC GATACAGCAA GAGAAGGATG ACCGCCATCG	5280
CTCCTAGTAA TAACCACAAC CAGAATTGCC CACGCTCTCT CACCGCTCGA TTCCGCTCTG	5340
CAATTGGTGC CGTATACGGA ATCCGCTTCC CACGTACCAA CAGACGATGA CTGTTAATCA	5400
TATACGGTGT ACAAGTCAAC AAGGTCGCAT AATCTTCCCC ATGTTGAATC AAGACAGGCT	5460
CAAAGTCATT CGGCTCCACC GTCACATCT GATCCACTTG GTAGGCCAAC ACCTGATCTA	5520
AAACGTGAAG ATAAAAGATA TCCCCTTTT TCATCTTATC CAATTGACTG AACAAATCTG	5580
CCGTTGGCAA TCCTCTGTGA GCAGTGATCA CTGTATGGT ATTTTCACCT CCAACAGGCA	5640
GCGAAGCCCC TTCTAACAGC CCTGCCCTT TCTGAAGAAT GTCCTCACTC GTTCCGACAT	5700
ACATCGGAAT TTCTTGATCA ATCGCAGGAA TTTCCACATA GCCAATCCGC TCATGGACCT	5760
TTAGCATATT GGCATATTCT GAGACGCCTT TCTTTTCTC TTGCTCTGTA AAAGGATCAA	5820
GAATTCAGA TGGTTTCAAG GTCGCATTGA AGGCTTGAGC CAAGCGCCAA CGCTCCTCAA	5880
GTCTGCTT ATCCATCTGG GAAACCGTCT CATCAAATC TTTAATAACC TCGTTTGACT	5940
CAATACGATA ATAATAACGA GACACCAATG GATATATCGC AACGGCGAAT CCTACTAAGA	6000
AAATCAGAAG AAGGATCAGC GGATGTTTCT TCTTTTGT GCCTTTTTT CGTGAACGTC	6060
TACTGTTGTC CATCCTCCAC CTTCACTTCC TTCCTTGCTG CTTTCAGCGC CTTCAAAGCC	6120
TTTCCGGTT GTTTTTTCTT CTTGCGCAAG CGTCGAATAA TCCATAAAAG AATCACAATC	6180
AAACCAACTG CCACATAAAA CAGGTAGCGA TAGAGATGAC TGAGTTTGT TGCTGCAATA	6240
AATCTTCT CAACCTCTGC TACGTACGGT ATCCGATGCC CCCGAACCAA TAGACGATGG	6300
GTATGATCA TGTATGGCGT ACAAGTCAGC AAGGTCACAT AATCATGACC TGSTACAATC	6360

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AATAAATCAT CAAAGTTCGT CGGCTCAATC ACCTTTACTT GATCCACTTG ATAGGCCATC	6420
ACTTCCTTGA TATTGTGCAC ATAAAACTTA TCCCCAACTT TAAGTTTGGT CAAATCCGTA	6480
AACATCTTAG CTGTTGGCAA ACCTGTATGT GCCGTAATCA CCGCATGGGT CGAATTGCCT	6540
CCGATCGGCA GAGAAGTTC CTCTAGATGC CCAGCCCCTT GCTGCAATAC CTCTTCAGCA	6600
GTACCAGCAT AAACCGGCAA ATCCACGTCA ATAACGGGGA TTTCCACATG CCCCATCCGC	6660
TCATGGATTT CIAACATACG TGCATACTCT GCTCGCCCTT TTTTCTTCAT TTCTTCCGAC	6720
CAAGGATCGC CACTCACTAC ATTATTCAAA GAGTCATTGA AGGCTTGTGC CAATTTCATT	6780
CGTTCATCAA TGTCAGCCTC ATCCAACGTT GCTTTTCTCT TATCAAAGTC AGCAATTTGT	6840
TGATTTGATT CCACTCGATA ATACAAGCGA GACACCAGCG GATACGCCAT TACCGCCATT	6900
CCAATGAAAA ATACCACTCC TAATAGGAGA TTATTCGTT TTTGCTTTT TGTTTTTACC	6960
ATTTTTATCA GCATCCCTT ATCTTCAAAC TTCAGGGTAT C	7001

(2) INFORMATION FOR SEQ ID NO: 89:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 10411 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 89:

GAGGGAGCTT AAGAAGTTAC CACCGTCCTC TAGCGCCTTA TCCGCATCAA AGTTAAGGTT	60
GATATTTTGA AAAGTGTGCG CAGCTTGTGA TACGATGCTT TGTTTAAGGT CATTTAGGGT	120
TTTAGTGAAA TCTGCATTGC TGAGGATATC ACTCTTTGAG AGATTCAAGG CAAAATTGAT	180
GATGATATTG ATCTGGTTTC CTGTTATGAC CTGATCAAGT TTGTAATTTT TTAAGGTATC	240
TTCAACAATC TTGCGGATAT CTTCTTCTGT CAGATTTCCT TACTTTCTT TAGCTTTGGC	300
GAGTCCTGAC TTGATATCAG CTAGGGCAAC GTTTAATTTA TTAGCATCAT AGCCTGATTT	360
GTCCTTGTTT TCAGCATTGA TATCTGACAA AGCTTTTAGC TCTTCTTGAG CCAAATCTTT	420
ATTAGCTTGT GGCACCTTGG CTCCATTAGC CTCTAGCGAA TAGTAAATCC CTGCTAAAGC	480
ACTTTCTCCT GTAAGTGGA TAGGGGCTGC TACAGTGATT TTGGCATGTT CCATACCCAG	540
CGTTACTGCT GCGTTTCGGT ACATATCCTG AGTCACCTTA GTGATATTTT CTGGTGTTC	600
AATCTTGACC TCAAGTGGCG ATTTGTCACC TAGCTTTTGA ATCTTGGCTG ATGAATACAA	660
CTGTAAGCTA GAGTCATTGG CCACATTCAT GATTTTAGAA TAAACATCAG GTGTCATGGT	720
CTTGAGTTCT TTGSTATCTG TTGAGGCATT GTAGCCAGT TTTTAAAGAG TTTGATTTT	780

709

TTGGTCTTCA GATAGGGAGG AACCTAGGAC ATATTCAGGT TGGACATAGG TTTCATCGAT	840
AACTTTTGA ACATCTGTTG CTGCATGGAC GCTATTCATA GCTGTTACTG CCCACAAGAT	900
CGCAGCGCTA GTCAGAAAGA GTTCTTTCT CATAGGGAAT TTCCTCCTTT ACTTCTTTAG	960
AGTAATATAT CTATCTTAAA GAAAACCTAT AACAAAAACA CCTGGTCTAG CCAGATGTTG	1020
AAAAGAGAGT GAAACATTG ATGATGTAAA GGTAAAGTCG TACCTGTCTA GAATAATAAT	1080
AGTTTCCTCC ATTTACATAG AGTTCAGCAC CGTGAAAAAT GGAAATGGGG TGAATATAAC	1140
TATAAGTCTT TCCAGTCCTA TTACCAAGCA AGGGGGCAAC AGTCTCACGA GAGTACTGTT	1200
TGGCTAGAGC CAGGGTATTT TCCTTGCCAT TTTGGGCGAT AAAATCGATA TAGGCAGGTC	1260
CAAAATTATA GGCTTGAACA GCTGTCCAGA TATCTACCCC CTCTTCTGC GCCAGATAGA	1320
GATTGCCTGT CAGAGTTTGA ATGCCTTGCC GAATGCTAGA GGCATTATCA TTGATGGTGT	1380
TGGTGGAACC ACTGCAGAC TCACTAGACT GCATAACATC GCCTTCTTTT CCTTTTGTTT	1440
CAGTATAAAT CATAGCAAGC ACAAGCTCTT CGTTTGCTGG GGTGTCTGT TCACTCAATA	1500
TTTCTCGCAC CATGGGTGA TAGGTCATGA CTGTGTTGAC ATCTTGATGA ACGCGGTAAG	1560
CTTTATAGCC AGCAAAAAGG AAGACTGCTA GTACAAGCAC TCTTCGAATT CGTTTAAACA	1620
TTATTTACTT TGGATATCCT CGATATTTTT GATTAAGATA GAGTAGGTTT CATTTTCGTT	1680
TTGGATAAAC TCAACAGACT CGGCGTCTTG ATAGACGTTA TTGGGAACGA TGAGCTCAAT	1740
TCCATTTGAT AAGGAGAGTT TTTGGTTTTC AAATTTCTTT AATTGGCGAC TGGCATCAAT	1800
TTTCATCAAAT TGAACAGGTT CTGGTACGGC TTCCTTGACT TGGTCAATAA AGCTCAAACG	1860
AGCCGTCAGA TTGTTGTCAA AAAGGTCATT AGCCAATTTC TCAGGTGACA ATTCATTGCT	1920
TTCTTCTAGG TTGTTGAAAA TAGCTGATTT GACCTTGGAT TGAAATGAA AATCATCTGT	1980
GTAAAAGAT TTAGCAATTC TCTGGGCTGT TTTTCCAGT TCCTTGATAG ATTTTTTAGG	2040
AGAAATCTTA GGAGCGACAG CAAGAAGATT ATCTGAAAAA TAGTTCAAAA AAGTCCCGTT	2100
GTACTTGATT CGTTTTTCAA TCAGGTGATA CTTGCTACTC TGAAGATTGA CCACCAAGGC	2160
CTCATCAGCT CCTGTTCCTA ATCCAGGCAG GTTATTCTGA GTTAGCTTGA TTGGATTATC	2220
AACTTCTCCT CCGAGGTGGG TCAAGGCTC CCGCAGGGCA ATTCGCAAGA AAGCGAAATG	2280
TTCTACACCT TCTTTAGAAA ATTGCACAAA AATCAAGTCA TTGGTCTTGA GATTTTCAGA	2340
AATGCTAAAC TCCTCTTTCC AGAGATTAGC CAGCGTACT GATGTCTCCA ACAAATCGTC	2400
TGTAATATGA TTGAAGAAGG GATTTTCTTC TTCGAAAATC CCAGTCTTGG CTTCATCTGA	2460
ATACACATGT TCAATTTTTT TACGCAGGTA TTCCTCGATT TTTGGAGTAA TATTGAGAAA	2520

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CTTATCTGCT AAGAACAGTT CGGTATCATC CGGACTGAAC TGGTGAATAA TGGCTTTCTT	2580
AATATAAATG TCCATAAAAG TTTTAGTCCT CGTATAATGG GAAGGCATCT GTCAATTCTT	2640
TGACTGCACT TCTCACTTCT TCTAATACAG CCTCATTTTC TGAATTCTTA AGGGTTTTAA	2700
TGATGAGTTC AGCCACTTTG CGACTTTCTT CTTCACCAAA TCCACGTGCA GTAATGGCTG	2760
CTGCTCCGAT ACGAATCCCA CTTGTCTTGA ATGGTGACAA GCTTTCGTAA GGGATTGAGT	2820
TTTTATTAA GGTAAATATG ACTTCATCCA ACAAGTTTG AGCAACTTTG CCGTTTTCTA	2880
CAACTTTAGT CACATCAACA AGGAAGAGAT GGTTTTCAGT TCCACCTGAA ATAATACGGA	2940
AATCAGCGTC TTGCAAGAAG ACATCTGCCA TAGCCTTGCT GTTCTTAATT ACATTGGCAG	3000
CATATTCCTT GAAGGCTGGA TCCAAACTT CTTTGAAGGA AACTGCCCTA GCCGCCACAA	3060
CATGCTCTAA AGGACCGCCC TGAATACCTG GGAAATAGC TGAATTGATT TTTTAGCAA	3120
GTTCTTCGTC ATTGGTCAAA ATCAAACCAC CACGAGGTCC ACGAAGGGTT TTGTGGGTCG	3180
TTGTGTGTGT GATATGAGCG TATGGAACCTG GGCTTGATG AAGGCCAGCC GCAACCAAGC	3240
CAGCGATATG GGCCATGTCC ACCATGAGCT TCGCACCGAC AGCATCTGCG ATTCACGGA	3300
ATTTTGAAA ATCGATAATT TGAGAATAGG CTGAAGCACC AGCTACAATC AGTTTTGGTT	3360
TACTTCTTG GGCTTGTTT AAGATAGCAT CAAAGTCTAA GAGTTCGGT TTAGGATCAA	3420
CACTATAAGA AACAAAGTTG TAGGTTTGAC CAGAGAAGCT AACAGGAGCC CCATGAGTCA	3480
AATGACCACC TGATGCCAAA TCCATTCCCA TAACCGTATC ACCTGGCTCA ATCAAGGACA	3540
TGTAAGCCGC ACAGTTAGCT TGGCTTCCTG AATGTGGTTG AACATTGGCA AATTAGCAC	3600
CGAAAAATTC TTTTGCGCGT TCAATAGCAA GAGTCTCTAC AACGTCTACT ACATCAGTTC	3660
CACCATAATA ACGGCGTCCT GGGTAACCCT CGGCATATTT ATTTGTCAAG ATAGACCCTT	3720
GAGCTGCCAT AACAGCCTTG GAAACTACGT TTTCCGAAGC AATTAACCTG ATATTATTTT	3780
GTTGGCGTTC TTCTTCTTTG GCAATAGCAT TCCAGAGATC AGCATCATAT GCTTTAAAT	3840
CATCTTTGTC AAAAAATCATA GGTCTTCTCC TTTATTGTGT GACTAGTCCA TTAGTTTGAT	3900
TTTACAATAA GAAAAATCAA CTAACAGATG CGAATAAACC GTTCTGTCAT TTTATCACAA	3960
GTATAGCCAA CTTTTTCATA AAATGCATGA GCACCCAGAC GATGATTGGC AGAATTTAAG	4020
CGGATAAACC CATAACCACA TCTTTTGTCT TCTTCTTCCA ACCCTTGATG TAAACTTTTA	4080
CCAATACCTT GACCTTGCGC TTGAGGTGAA ACTGCTAAAG CTAAGATATT AAATCCTGCT	4140
TTGGAATAGA GTGATTCGTA AACTTCAGCG TGGACATATC CAAGTAAGAC ATGATTAGCT	4200
GCATCCTCAT AGCCAAGTAG GAAATGATGG GAATCCTGAG ACAGTCTAGC TAGTTGGCTA	4260
GCCGTTTCCT CTGACTAAA AGTATAACCC AAAGCCTCTT GGTGATGTC ACATATAGCT	4320

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TTCACATCAG TTTCTCTTAA ATCTCTTAGC ATCTCATTCC TCCTCAAAAG AAATCTTTGG	4380
CAACCGAGCA AGAATATCTT CTCGCTTAAT GGCCCTTGA CGTAAGATTT TCACCTTGTC	4440
TCCCGACAAA TTCAAAATAG TTGAATCCTG TCCAGTTAGA AAAGCATCGT CTTCCAGACC	4500
CAGAACCTCT TGGTCAAAAT CCTCTAGAAT TTGATTAAAG GTCACCTCCAC TCGCCTGACC	4560
TGAGATATTG GCAGACGGCC CAATCAAGGG ACCTGTCTCT CGAATCAAAT CAAGGGTAAT	4620
GGGATGACTA GGCATCCGAA ATCCAACAGT TGCAAGGCCA GAATTGACCC AATAGGGAAC	4680
TCGGTCATTA GCTTCGAGAA TAATGGTCAA GGGACCTGGT AAAAAGATCT CTACAAGTTT	4740
TTGAAGATAA GTTGGCTGAT TCTTTGAAAA GTACAAGATG TCCTCTAAAG AGGCAACATT	4800
GAGATTGAGC GCCTTGCTCT TACGTCGACG TTAAAGCTGG TAAACATGGT CAACTGCTTT	4860
TTCTGCTAGC GCCTTAGCAA AGAGACCGTA AACTGTCTCT GTAGGCAAAA CGACAGCTCC	4920
ACCATTTTCC AACTCTTGTC TAATCCTGTC CATCATCAAC GACAACCAATC CTATCTTGAC	4980
CAAAATGGTC CTTGAGTGTT CGTACTCGCT TTTCAGGAAG ATGTTTCCTA AAAAGTTCAG	5040
GAACACTTTG ACCTTGCTTG TATCCAATTT CAAGGTAAAT CTTACCACCA TCTTTGAGAT	5100
AGTCTTTTGC ATCTTCCGCA ATTCTACGGT AAATAGCTAG GCCATCCTCA TCTGCAAAGA	5160
GAGTAGATG AGGCTCCGAA TACAAGACAT TCAAGCCTAC CTCTGACTCA TCTTCACGAG	5220
AGATATAGGG TGGATTGGAA ACAATTATAT CATATTTTTC AGAAATTTCT GTAAAACAGT	5280
CAGATTTTTT TAAAAATATT TGAAGATTTT GATTTTATAG ATTTTCGCTA GCTACATCTA	5340
AAGCATCTTG GGAATATCT GCTGCCGTC CTGACCAATC TGGTCTGTTT TTTGCTAGAG	5400
CGAGAGCAAT AGCTCCACTA CCTGTTCCGA TATCTAGGAC CATAAGATTT TTCACAGGAT	5460
TTTCAGCCAG GATAAGCTCC ACCAACTCCT CTGTTTCTGG ACGAGGAATC AAAACCCGTT	5520
CATCCACCTT TAAATGCATT CCATAAAAAAT CTGCCTGTCC AATGATGTAC TGAGCTGGCT	5580
TGTGAGCTGC TAGTTGCTGG TAAATATCTT CTACAAATG TTTTCTCTCC TCTGTTGTCA	5640
CCTCCTGCTG GAGGGCAAAA ATAAAGTCTG TAAAGATAG ATTTTTCAGA CTACGATAGA	5700
CAAAAGAGAG GCTTTCCGCT TCCTCTCCTT GTCTTATCAA CTCTCTTCA AAATTTGAAA	5760
ATAATTGAGC TAATTTCAAT ATTTGTTTAA TTCTTCTAGT TTTTGTGTTT GGTCATAAAG	5820
CACCAAGGCA TCCACAACCT CGTCCAATTT ACCAGACAAA ATCGTATCTA GTTTTGGAG	5880
GGTCAAGCCG ATACGGTGGT CTGTGACACG GTTTTGTGGG AAGTTATAAG TTCGGATCCG	5940
TTCTGAACGG TCACCAGTAC CGATTGTCGA CTTACGCTCA GCGTCCTGCT CATCTTGAGC	6000
AATCTGAGCA AAGTGGTCAG CAACACGGGC ACGGATGATT TTCATGGCCT TCTCACGGTT	6060

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CTTCTGCTGG GTACGTTCTT CCTGCATCTC AACCTTGATA TTGGTTGGCA AGTGAACGAT	6120
ACGAACGGCA GTCGCAACCT TATTGACGTT CTGTCCACCA GCACCAGAGG CGTGATAGAT	6180
GTCGACACGA AGGTCTTTTG GATCAATGTC GTATTCAACC TCTTCAACTT CTGGCATAAC	6240
AAGAACTGTC GCTGTCGAAG TATGAACACG GCCTTGGCTT TCTGTCACAG GAACACGTTG	6300
CACACGGTGG GCACCTGATT CATACTTAAG CTTAGAGTAT ACAGACTGAC CTGAAACCAT	6360
AGCAACCACT TCTTTAAAC CACCGACACC ATTCATAGAG GCTTCCATGA CTTCAAAGCG	6420
CCAACCTTGG GCTTCCGCAT ACTTTTGGTA CATAGTTAGC AAATCTCCAG CGAAAAGTGC	6480
CGCTTCGTCT CCACCAGCTG CTCCACGGAT TTCAAGGATG ATATTCTTGT CATCGTTTGG	6540
ATCCTTTGGA AGGAGCAAAA TTTTCAGTTT TTCTTCATAT TCTTCTTTT CAGCCTTGGC	6600
ATCTTTGAGT TCTTGCTTGG CCAATTCCTC CAAGTCCGCA TCTCCGCCTG ATTCCTTAAT	6660
CATCTCTTCG GCATCGACGA TATTTTGAAG GACTTGTTTA TACTCACGGT AGGCTATTAC	6720
GGTGTACGA TTGGAAGCTT CTTCCTTTGA AAGCTCCATA AAACGCTTGG TGTCTGAAAC	6780
GACATCAGGG TCACTCAGCA ATTCTCCTAA TTCTTCATAA CGGTCTTCTA CAACTTGTAG	6840
TTGATCATAG ATGTTTCAAT TTTCTCCTTA TTCTCAATT GTTAAATCAT AGATTGCTAC	6900
TACTTCATTC TCGGATATTT CCCCAGTTTC TTAAATCCA TAACTGAGGT AACAAAATCT	6960
TGCCTGTTCA TTTTCTGGTT CATAAGACAA CCAAAGTTTA TTGCTTAAAC CTGCTGGCGC	7020
TGTTCCAACA TAGTCTAGTA CTTTATCCAT AATTGGTTTA AAATATCCTT GATTTTGAAA	7080
ATTCTTATCA ATCATAAAAC GAAATAGTAA ATAATTCCA CTAATAATC CGATCTTTTT	7140
ATCATAAGCT ATCATACAA AACCTATAAT TGCATCATTA TCATAAACTG CCAATGGAGC	7200
TACAAAATCT CCATTTTGTAG TGTAGACGTA TGCTTCAGCT AAATAATTG CGTTGGTTGC	7260
AATGAATTGT TTTTGATATT CCTTGACATC CAAATTAAA ACATCAAAAT AATTTCCAT	7320
TGTAACATCT CTTAGTTCAA TTGTCATAGT TTTGCTCCTT GTTAGAGGT ATCATTTGGC	7380
CAAAATAATG TTTACGGCAA ACTGAGATAT AGGTTTCGTT ACCACCAATC TGGATCTGCT	7440
CTCCATCGTA AACGGGCAGT CCATCCTGTG TTCGCAACAC CATGGTCGCC TTTTCTTTGC	7500
AATACTGACA GATGGTCTTG ATTTCGTCAA TCTTGTCTGC TAAAAGCAAG AGATATTTGG	7560
AACCTTCGAA CAATTCATTG CGAAAGTCAT TTTTCAAGCC AAAAGCCATG ACGGGTATGT	7620
CTAACTCGTC CACAACACGA GCTAGGTCGT AAACATGGTG GCGTTTGAGA AACTGGGCTT	7680
CATCGACCAA AACACAGTAA GGTTTTCTCG GTAGGTCTCG GATATAGCCA AAGATATCCG	7740
TTGTTTCCTC AATCGCAAG GCAGGGCGTT TCATGCCAAT TCGACTCGAC ACATAGCCAA	7800
CGCCGTCACG CGTATCCAGA GCCGAGGTCA TAATCACAAC ACCTTTTCCT TGCTCCTCGT	7860

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AGTTATAGGC CACTTTGAGA ATCTCAATCG TTTTACCAGA GTTCATGGTC CCATAACGAT	7920
AGTACAACGT TGCCATGTTT CTTGCTTCAC GTCCATTCTT AAATTTTTCG TACATTTCTAG	7980
TATATCATAA TTTTCTTAAG CTTTAAACGG CAAAATGTGG TAAAATAGAA GAAATCAAAA	8040
ACTAGTGGAG GAAGCTATTA TGCCATTGTG ACGCATCGAT TTATTTGAAG GACGCACGCT	8100
CGAGCAAAAG AAAGCTCTTG CTAAGGAAGT AACGGAAGCA GTTGTCGCA AACTGGAGC	8160
CCCTCAATCT GCTGTCCATG TCATCATCAA CGACATGCCA GAAGGAACTT ACTTCCCACA	8220
AGGGGAAATG CGTACTAAAT AAGCTAGCTT AAGCAGAATT GCTTAGGCTT TTTCAATCTC	8280
CAAGTAGCAT TCATTGAAGA AATATCCTAA ATTTGTTACA ATTTGAAAAG AACTTGGAG	8340
AATTTCCAAG AAAAGAGCTA TTAATTAAG GAAACATTAT GATTACACGT GAATTTGATA	8400
CCATCGCTGC TATCTCTACT CCACTAGGTG AAGGGGCTAT TGGTATTGTC CGCCTGAGCG	8460
gAACAGACAG TTTTGCTATT GCGCAAAAGA TTTTAAAGG AAAAGACTTG AACAGGTTG	8520
CCAGCCACAC TCTCACTAC GGTACATTA TTGATCCTCT GACTGGTAAA GTCATGGACG	8580
AGGTATGGT TGGGGCTATG AAGTCTCAA AGACCTTCAC TCGTGAGGAT ATTATCGAGA	8640
TTAACACCCA CGGTGGGATT GCGGTGACCA ATGAAATCTT CCAGCTAGCT ATTCGTGAAG	8700
GGGCTCGGTT GGCAGAACCT GGTGAATTA CCAAACGTGC TTTTAAAC GGTGCGTAG	8760
ACTTGACACA GGCAGAGGCT GTGATGGATA TCATCCGTGC CAAGACTGAC AAGGCCATGA	8820
ACATGCGGT CAAACAATTA GACGGCTCCC TTTCTGACCT CATTAACAAT ACCCGTCAAG	8880
AAATCCTCAA TACACTTGCC CAAGTTGAGG TCAATATCGA CTATCCTGAG TATGACGATG	8940
TTGAGGAAGC CACTACTGCT GTTGTCGAG AGAAGACAAT GGAGTTTGAG CAATTACTAA	9000
CCAACTCCT TAGGACAGCA CGTCGTGGTA AAATCCTTCG TGAAGGAAT TCAACGGCTA	9060
TCATTGGACG TCCCAACGTT GGGAAATCAA GCCTTCTCAA CAACCTCTTG CGTGAGGACA	9120
AGGCTATCGT AACAGATATC GCTGGGACAA CACGAGATGT CATCGAAGAG TACGTCAACA	9180
TCAATGGTGT ACCTCTCAA TTGATTGATA CAGCCGTAT TCGTGAAACG GATGATATCG	9240
TTGAACAAAT TGGAGTTGAG CGTTCGAAA AAGCTCTTAA GGAAGCTGAC CTAGTTCTGC	9300
TAGTACTAAA CGCTAGTGAA CCACTAACCG CCCAAGATCG CCAACTCCTA GAAATCAGTC	9360
AGGAGACTAA TCGCATTATT CTTCTTAACA AAAGTACCT GCCTGAAACG ATTGAAACTT	9420
CGGAACTACC TGAAGATGTC ATCCGCATTT CAGTTCTTAA AAATCAAAAC ATCGATAAAA	9480
TCGAAGAGAG AATCAACAAC CTCTTCTTTG AAAATGCTGG TTTGGTTGAG CAAGATGCTA	9540
CCTACTTGTC AAACGCCCCG CACATTTCTT TGATTGAGAA GGCCGTTGAA AGCCTACAAG	9600

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CTGTTAACCA AGGTCTTGAA CTAGGGATGC CAGTTGACTT GCTTCAAGTT GACTTGACCC	9660
GTAATTGGGA AATTCTAGGA GAAATCACTG GAGATGCTGC TCCAGATGAA CTCATCACCC	9720
AACTCTTTAG CCAATTCTGT TTAGGAAAAT AAGAAAAATC CATGATCCTT CATTCGGTCA	9780
TGGATTTTAG GTTCTATAAT ATTTGTAGTG GGTAAATCCA CTATAGATAT TATGGAGCCT	9840
ATTTTATTCT AGAAAAAAG TCCCATATGA CCTATAATGA AAAGCGACAA AACAACTCAT	9900
TAGAAAGAAT CATATGGAAC AATTACATTT TATCACAAAA TTAGTAGACA TTAAAGACCC	9960
TAATATCCAG ATTTTAGACA TCATCAATAA GGATACACAC AAGGAAATCA TCGCCAAACT	10020
GGACTACGAC GCCCCATCTT GCCCTGAGTG CGGAAACCAA TTGAAGAAAT ATGACTTTCA	10080
AAAAACCTTC TAAAAATCCT TATCTTGAAA CGACTGGTAT GCCCACTAGA ATTCTCCTTA	10140
GAAAGCGTCG ATTCAAGTGC TATCACTGTT CAAAAATGAT GGTCGCTGAA ACTTCTATCG	10200
TCAAGAAGAA TCACCAAATC CCTCGTATCA TCAACCAAAA GATTGCTCAA AAGTTAATTG	10260
AAAAGATTTC TATGACTGAT ATTGCCCATC AGCTTTCCAT CTCAACTTCA ACTGTTATTC	10320
GTAAGCTCAA TGACTTTCAC TTAAACATG ATTTTCTTG TCTTCCTGAG ATTATGTCTT	10380
GGGATGAGTA TGCTTTTACA AAAGGGAAGA T	10411

(2) INFORMATION FOR SEQ ID NO: 90:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 2393 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 90:

GTTTTGGGTT CTGGAATTA TCAGATGGTT GGAAAAGCCG TCCACATCAA GATAGTGTTC	60
GGAGATTTAA GTTTAAATTG AAGAACTAA CACAGAGGAA ATGGAGTATA GACCTAACAA	120
GACGTATTGA GCAACTGAAT TTGTCTATTC GAGGATGGAT AACTATTGC TCATTGGGAA	180
ATATGAAAAG TATAGTCGCC AGCATAGATG AGCGCTTCCG TACTCGCCTA CGAGTGATTA	240
TCTGGAAGCA ATGGAAGAAG AAATCGAGAC GATTATGGGG ATTGCTTAAG TTAGGAGTTC	300
CTAAATGGAT AGCAGATAAG GTATCTGGCT GGGGCGACCA TTATCAATTA GTAGCTCAGA	360
AGTCGGTACT TAAACGTGCT ATATCAAAAC CAGTCCTGGA AAAACGTGGA CTGGTTTCGT	420
GTTTGGATTA TTACCTTGAA CGACATGCGT TAAAAGTTAG TTGAACCGCC GTATGCCAAA	480
CGGCACGTAC GGTGGTGTGA GAGGGGCTAG AGATTATCCC CTACTCGATT AACTCCCCTG	540
AAATTTATTT TAATTATGCA AATTCACGT ATTTTGTATG CTGAGACGAC GATCCTGGGA	600

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ACTTTTCAGA TATTTTTTTG ACTATCTAAA TCTATCATTA GAAAAGCTTA GAGCGCCAAA	660
GGATTTGAGC GTTTTTCTGA TTTTAAAGAC TTTTCCAGT CTCTTTTTCG ATTGAAGATG	720
TAATTATTCT ACTAACTAAC TAACTTCTTA GTACTAGCCA ACAACGATAA TCATAAATCC	780
TCCTAAAAAT AGGAATAATA AAGGCAATAG TTTTGTGTTT TTCATGTAAA AAACCTCACT	840
TTTGTGTTCT GCTATTTTAT GCTAAAATAT TAAAAATCAA ATTAAATCC AAAGTTTGTA	900
ACTAAAGGGG GAGCGCTACA TGTCTAATTC ATTTGTCAAG TTGTTAGTCT CTCAATTATT	960
TGCAAATTTA GCAGATATTT TCTTTAGAGT AACAATCATT GCTAACATAT ACATTATTTT	1020
AAAATCAGTA ATTGCCACAT CACTAGTTCC TATCTTAATA GGAATATCCT CTTTGTGTGC	1080
GAGTCTTTTA GTTCCGTGG TTAATAAAG GTTAGCGCTA AATAGGGTTT TATCTTTATC	1140
TCAATTTGGA AAGACTATAT TATTGGCGAT ACTGGTAGGA ATGTTTACCG TAATGCAATC	1200
CGTAGCGCCT TTGGTGACCT ATCTATTTGT TGTGCAATT TCCATACTAG ATGGTTTTCG	1260
AGCACCCGTT TCCTATGCTA TTGTGCCACG CTATGCGACC GATTTGGGTA AGGCTAATTC	1320
AGCCTTATCA ATGACTGGIG AAGCTGTCA ATTGATAGGT TGGGGATTAG GTGGACTCTT	1380
GT'TTGCAACA ATTGGTCTGT TACCTACCAC GTGTATCAAT TTAGTCTTGT ATATCATTTT	1440
TAGCTTTCTG ATGTTATTTT TCCTAACGC TGAAGTGGAG GTGTTAGAGT CAGAACTAA	1500
TCTTGAAATT TTGCTCAAAG GTTGAAGTT AGTTGCTAGA AATCCTAGAT TAAGACTTTT	1560
TGTATCAGCA AATTTATTGG AAATTTTTC AAATACGATT TGGGPTTCTT CCATTATACT	1620
TGTTTTTGTA ACGGAGTTAT TAAATAAAAC GGAAAGTTAC TGGGGATATT CTAATACAGC	1680
ATACTCTATT GGTATTATAA TTAGTGGCTT AATTGCTTTT AGGCTATCTG AAAAGTTCCT	1740
TGCTGCTAAA TGGGAACCCC AATTATTCAC CCCAAATCTA AAAACCATCC AGAATCCTTG	1800
CCTTAGCTTA GATCCTGGAT GGTTCCTTTT TTCACCCAAT GGGTGT'TTT TACTAGACAA	1860
AAAAGAGTTT CCCCTTTATG GTATAAGTGT AGAAAAAAC AAAAAAGAA AGGAACTCA	1920
CATGAACAGT TTACCAAATC ATCACTTCCA AAACAAGTCT TTTTACCAAC TATCTTTTGA	1980
TGGAGGTCAT TTAACCCAGT ATGGTGGTCT TATCTTTTTT CAGGAAGTTT TTTCCAGTT	2040
GAAACTAAAA GAGCGGATTT CTAAGTATTT AGTAACGAAT GACCAACGCC GCTACTGTCG	2100
TTATTCGGAT TCAGATATCC TTGTCCAGTT CCTCTTTCAA CTGTTAACAG GTTATGGAAC	2160
GGAATATGCT TGTAAGAAT TGTGAGTGA TGCCTACTTT CAAAAATTGT TGAAGGAGG	2220
GCAGCTTGCT TCACAGCCAA CCTTATCCCG TTTCTTTCC AGAACTGACG AGGAAACAGT	2280
CCATAGTTTG CGATGCCTCA ACCTTGAATT GGTGGAATTC TTTTACAGT TTCACCAGCT	2340

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AAACCAACTC ATTGTAGATA ACGATTCTAC CCATTTCACA ACTTATGGCA AGC 2393

(2) INFORMATION FOR SEQ ID NO: 91:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 4762 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 91:

TTTGTATCTT TTTAGGTCTC TTTCAATCCA AACCCCTTAA ACTATACGTC ATTCGGGTTT	60
CTGCAAGTCT TGTGGTAAAT TTAGGTTTGA TTTTACTTTT CTTTTCACAA GAGCCTCTGC	120
ACGCTTCTTA TTTGATGGTC GTCTTCCCTG TTTTCCTACT TTTATTGGTA ACCAATATTA	180
AGAGTCAACA GAGGGGGCGT AGTGCTAGAA GAAGCCGAAG AGAAACGCCA TTATGCCTAT	240
GGAGTCGTTT CTTCAAAGGA AATCTATATC TGCTACTTTT TGGGTTTGTC TATCTTTTGT	300
CTGTTCCTTT TTTGATGAAG TTTGTCCCTT ATCCAGTACC TTATCAAGAA CGTAATCGTC	360
TTGCTGATTT GGTAAAGAG GAGACAAATA CGGAAGATGC TATCTCATGC ATGGGATGAT	420
ACTGCGACTC TTTATCGTAA GAGTGAGCGC TTGTCCCATC GCGCATTTTG TCCCCGTTGC	480
ACTATACAGC AACTGAGGAA AATCGTAATA AGTTACTTAA TGACTTGAAA GAAAAACAAC	540
CTAAGGTGAT TGTGGTAAAT GATAAGGTGG TAGTCTGGTC TGAAGTGAA ACACTCTTAA	600
AAGAAAATTA CCAACAAGTA AAGACTGATT ACTCAGAGTT TAAAGTCTAT AAAATTAAAT	660
AACCAATCA ATATCTTGTG TATTTTAAAA AATTTTAGGA TTTTAAACAC AAGATATTGA	720
TTTTTCTTTT TAGAGTGGTA TAATACTTTT TAGAAAGAAC ATTTTAGAAA AGAGCATGCA	780
TATGATTGCA CTAGAAGAAA AAATTACAAT TTTGCCAACT CTCTTCGTCG AGAAACGAGA	840
TGGGAGACGT GTTGTATTTG ATGTGGACAA GATTGACAAG GCTCTCCACA AGCGGCTGA	900
CAAGGTATATG GATGTGACAC CCCTGGTTGA AAAATGCCTC AATGATCTGA CTGAGCGAAT	960
TATTACAGAA ATTCATAGTC GCTTTCACAA GGAATTAAG ATTTACGAAA TTCAAAATAT	1020
CGTAGAACAT GAATCCTTG AAGCCAAAGA ATATGCGCTG GCTGAGGAGT ATATTACTTA	1080
TCGGACACAG AGGGATTTTG AGCGCTCAAA AGCGACGGAT ATCAACTTTA GTATTTCATAA	1140
ACTTCTCAAC AAAGACCAGA CAGTTGTCAA TGAAAACGCT AATAAAGACA GTGATGTCTT	1200
TAACACTCAG CGTGATTTGA CAGCAGGGAT TGTGGGAAA TCAATCGGAC TGCAATGCTT	1260
TCCTAAGCAC GTAGCCAATG CCCACCAAAA GGGGGATATC CACTATCACG ATTTGGACTA	1320
CAGTCCCTAT ACCCCTATGA CCAACTGCTG TTTGATTGAT TTTAAGGGTA TGTTGGAAAA	1380

717

TGGTTTTAAG ATTGGAAATG CAGAGGTAGA GAGTCCCAAG TCTATCCAGA CTGCGACAGC	1440
ACAGATTTCT CAAATCATTC CCAACGTTGC TTCTAGCCAG TACGGTGGCT GTTCAGCTGA	1500
CCGTATCGAT GAAATTTTGG CGCCTTATGC AGAGAAGAAT TATCAAAAAC ATCTCAAAGA	1560
TGCAGAAGAG TGGGTATTGC CTGAAAAACA GGAAGATTAC GCTTGAAGA AAGCGCAAAA	1620
GGACATCTAC GATGCCATGC AATCTCTTGA GTATGAAATC AATACTCTCT TCACTTCAAA	1680
TGGACAAACA CCTTTTACTT CGTTAGGTTT TGGTCTGGGA ACCAGTCGTT TTGAACGAGA	1740
AATTCAAAAA GCTATTTTAA ACATTCGCAT CAAGGGTCTT GGTTCAGAAC ACCGTACGGC	1800
TATCTTTCTT AAACCTATCT TTACGCTTAA AAGAGGCCTC AACTTAGAGG AAGGAACTCC	1860
CAACTATGAC ATCAAGCAGT TGGCTCTAGA GTGTGCAACC AAGCGGATGT ATCCAGACGT	1920
CTTGCTCTAT GATAAGATTG TTGATTTGAC AGGTTCTTTC AAGGTGCCTA TGGGCTGCCG	1980
TTCTTTCTT CAAGGGTGA AGGATGAAAA TGCTGTAGAA GTCAATTCAG GTCCGATGAA	2040
TCTGGGTGTT GTGACGGTAA ATCTGCCTCG TATTGCTCTT GAGTCTGAAG GTGATATGAA	2100
TAAGTTCTGG GAAATCTTCA ACGAGCGAAT GAATATCGCA GAAGATGCTC TTGTTTACCG	2160
TGTCGAACGC ACTAAAGAGG CGACACCAGC GAATGCTCCT ATTCTTTATC AGTACGGTGC	2220
TTTGTGCCAT CGTCTAGGTA AAGAAGAAAG TGTGACCAG CTCTTTAAGA ATCGTCGTGC	2280
GACCGTTTCG CTGGGCTATA TCGGCTTGTA TGAAGTAGCG ACAGTTTCTT TTGGTAACAG	2340
CTGGGAAAAGT AATCCAGATG CTAAGGAATT CACGCTAGAC ATCATTACAG ATATGAAACG	2400
CCGTGTAGAA GAGTGGTCAG ACCAATATGG CTACCATTTC TCTATCTACT CAACACCATC	2460
CGAAAGTCTG ACAGACCGTT TCTGCCGACT AGATATAGAC AAGTTTGCCT CTATTCCTGA	2520
TATCACAGAC AAGGAATACT ACACCAACTC TTTCCACTAC GATGTTCTGA AAAATCCAAC	2580
ACCGTTTGAA AAATGGACT TTGAGAAAGT CTATCCGAA GCAGGTGCGT CAGGTGGTTT	2640
CATCCATTAT TGTGAGTATC CAGTCCTTCA GCAAAATCCA AAGGCCTTGG AAGCTGTCTG	2700
GGATTATGCT TATGACCGTG TAGGCTATCT AGGCACCAAT ACTCCGATTG ACCGTTGCTA	2760
CAAGTGTGAC TTTGAAGGGG ATTTTGAACC AACTGAGAGA GGGTTTGCTT GTCCAAACTG	2820
TGGCAATAGC GACCCTAAAA CAGTAGATGT GGTGAAACGA ACTTGTGGCT ACCTAGGTAA	2880
TCCTCAAGCA AGACCGATGG TCAACGGGCG TCACAAGGAA ATCGCTGCGC GTGTCAAACA	2940
TATGAATGGT TCAACGATTA AAATAGCTGG GCATCAAGTA ACAAATTAGA AAGAAATGAA	3000
ATGGGAAAAT ATCAACTAGA CGATAAGGGG CGCGCACAAG TGACCCGTTA TCACGAGAAA	3060
CACTCTAAAG GTGGAGCTGG TAAGAAAGAA CGCTTGCTTA GCTTCAGAGA ACAATTTTAA	3120

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AACAAGAACA AGAAAAATA AAAGTGAGAG CCAGCTCTCG CTTTCTCAT AGTGGGAGGT	3180
AAGGATGGAA TTACGCAGAC CAAGATTAGC GGATAAGAAA GCTGTTTATG ATATCATGAC	3240
AGAGTTTGAA AAATTTCACT CGCCTCACGA CGGCGGTTTC TGGGATACAG AGAACTTTGT	3300
GTATGAAGAC TGGTTAGAAA GCAATCAGGA ACAGGAAATG GGGATTAATC TGCCTGAAGG	3360
ATGGGTTTCT GCAATTCAGT TAGTGGCTTT TTCTGAGAAA GGTCAAGCAG TTGGATTTCT	3420
TAATCTCCGG TTGCGCCTCA GTAACCTTCT ACTAGAAGAA GGTGGCCACA TTGGCTACTC	3480
CATTCGTCCA TCTGAAAGAG GCAAGGGTTA TGCAAAAGAG ACTCTCCGTC AGGGCTTGCA	3540
AGTTGCTAAG GAAAAGAACA TCAAGAAAGC TCTGGTGACC TGTAAGTGTGA ATAATCCTGC	3600
TAGCAGAGCA GTCATTCTAG CAAATGGTGG AATATTTGAG GATGCTCGCA ATGGAGTCGA	3660
GCGTTATTGG ATAGAGGTAG CGAATGAATA ATCCAAAACC ACAAGAATGG AAAAGCGAGG	3720
AACTTAGTCA AGGTCGTATC ATTGACTACA AGGCCTTTAA CTTTGTGGAC GGCGAAGGCG	3780
TGCGCAACTC TCTCTATGTA TCAGGCTGTA TGTTCCTACTG CGAGGGATGT TATAATGTTG	3840
CGACTTGCTC TTTTAATGCT GGCATTCCCT ATACAGCAGA ATTAGAAGAG CAGATTATGG	3900
CAGACCTTGC CCAACCCAT GTTCAAGGCT TGACTTTGCT GGGAGGGGAG CCTTTTCTCA	3960
ATACTGGGAT TCTCTTGCCA CTGTGTAAGC GGATTCGGAA GGAATTGCCA GACAAGGACA	4020
TCTGGTCCTG GACCGGTAC ACTTGGGAAG AAATGATGTT GGAAACTCCA GATAAACTGG	4080
AATCTTTGTC ACTGATTGAC ATTCTTGTCTG ATGGAAGATA TGATCGAACT AAGAGAAATC	4140
TTATGCTCCA GTTTCGAGGT TCATCTAACC AACGAATTAT CGATGTGCAA AAATCGCTCA	4200
AAAGTGGGCA AGTAGTGATT TGGGACAAGC TCAATGACGG AAAAGAAAGC TATGAACAGG	4260
TGAAGAGAGA ATGAAGAAAA AGGACTTAGT AGACCAACTA GTCTCAGAGA TCGAGACGGG	4320
GAAAGTCAGG ACACTGGGAA TATACGGTCA TGGAGCTTCA GGTAAATCAA CCTTTGCACA	4380
GGAATTGTAC CAAGCTTTAG ATTCTACTAC AGTAAATTTG CTAGAGACAG ATCCTTATAT	4440
CACCTCAGGA CGCCATCTGG TAGTACCCAA GGACGCGCCG AATCAAAAGG TGACAGCCAG	4500
TCTGCCAGTG GCGCATGAAC TGGAGAGTTT GCAGAGAGAT ATCCTTGCTT GCAGGCGGGT	4560
ATGGATGTCT TGACAATTGA AGAACCTTGG AAGGCTAGTG AGGTCTTGTC TGGAGCCAAA	4620
CCAATTTTGA TTGTGGAAGG GATGTCTGTT GGCTTTCTAC CCAAGGAACT CTTTGAAAAA	4680
ACCATCTGTT TCTACACGGA TGAGGAGACC GAATTAAAGC GACGCCTTGC TAGAGATACG	4740
ACTGTGAGAA ATCGCGATGC GG	4762

(2) INFORMATION FOR SEQ ID NO: 92:

(i) SEQUENCE CHARACTERISTICS:

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(A) LENGTH: 3832 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 92:

GATGCAGGTT TCGACCCACA TATTCCAGAA AATTACTTTA AAGATGATGA TGTTAATCAG	60
GTACCTTGTC TTTGTTGGTC TTCATCTGCA GCCCTCTTTT TCAGTAATG GGTAGACCAT	120
GCGGCTATC AGGAGACGCC TTTTGATTGG AGAAAGATAG AAGATGATGC ATCTGCATAT	180
GGGTATTTAT AAGAGGAATT ATGACATATT TAGACGCTTT TAAATCAGGT ACCTTGGTTT	240
TACCGAGTGC CCTGCTCTTG CATTTTAAGG AACTCTTTCC TTCTAGCGAC GATTTTCTGG	300
TTTGGAATT TTTCTATTG CAAAATACGA CAGGCTTAGA AGAAATGTCG CCAAGCCAGA	360
TTGCTGAAAG GATTGGCAAG GAAATTTGCG ATGTCAACCA GTCCATTCT AATCTGACGG	420
AAAGGGGACT GCTCCAGTAT CGTACTATCG AATTAAATGG CGAAATGAA TTGCTCTTTG	480
ATGCTAGTTT GGCCTTGGA CGTTTGATG ACCTGTTTGG AGCAGTTCA TCAAGTTCAG	540
ACCAGCTAAC ACCTCAAAAC CAGCTCAAGG ATTTGGTGGA AACCTTCCAG CAGGAGTTGG	600
GACGATTGTT GACGCCTTTT GAGATTGAGG ATTTGACCA GACACTAAAG GAAGATGGAA	660
CCAGTGCTGA CTGTATTAAG GAGGCTCTTC GTGAAGCTGT TTGAATGGA AAACCAACT	720
GGAAGTACAT TCAGGCCATT TTGAGAACT GCGGCCATGA AGGAATCAAG AGTGTGGCTC	780
AAATTGAGGC CAAGAGAGCA GAAAGAGAAG CAAGCAATCC TCAGTTGACA CAGGTATCTG	840
CAGATTTCAT AAATGCCATG GATCTCTGGA AGGATTAATC CATGCAAGTA GCCTTGAAAT	900
CCGAGTAAGA TTGCAAGCT GTGTATAATT GTGATAGAAT AAATAGAAA TAAATTGAAA	960
AAAGAGGTAT GTGAAATGTC ACGTAAACCA TTTATCGCTG GTAACCTGGA AATGAACAAA	1020
AATCCAGAAG AAGCTAAAGC ATTCGTTGAA GCAGTTGCAT CAAAACCTCC TTCATCAGAT	1080
CTTGTTGAAG CAGGTATCGC TGCTCCAGCT CTTGATTTGA CAACTGTTCT TGCTGTTGCA	1140
AAAGGCTCAA ACCTTAAAGT TGCTGCTCAA AACTGCTACT TTGAAAATGC AGGTGCTTTC	1200
ACTGGTGAAA CTAGCCCACA AGTTTGTAAA GAAATCGGTA CTGACTACGT TGTATCGGT	1260
CACTCAGAAC GCCGTGACTA CTTCCATGAA ACTGATGAAG ATATCAACAA AAAAGCAAAA	1320
GCAATCTTTG CGAACGGTAT GCTTCCAATC ATCTGTTGTG GTGAATCACT TGAAACTTAC	1380
GAAGCTGGTA AAGCTGCTGA ATTCGTAGGT GCTCAAGTAT CTGCTGCATT GGCTGGATTG	1440
ACTGCTGAAC AAGTTGCTGC CTCAGTTATC GCTTATGAGC CAATCTGGGC TATCGGTACT	1500

720

GTTAAATCAG CTTCACAAGA CGATGCACAA AAAATGTGTA AAGTTGTTCG TGACGTTGTA	1560
GCTGCTGACT TTGGTCAAGA AGTCGCAGAC AAAGTTCGTG TTCAATACGG TGGTTCTGTT	1620
AAACCTGAAA ATGTTGCTTC ATACATGGCT TGCCAGACG TTGACGGTGC CCTTGTAGGT	1680
GGTGCCTCAC TTGAAGCTGA AAGCTTCTTG GCTTTGCTTG ACTTTGTAAA ATAATCAGTA	1740
AGTAGCAAAA GCTAGGTGGA ACAGCATTCA GATGTCTGTT ACATTTTSTA TAGGAGAGAA	1800
AGATTGAAAA CAAAAATGG ATTAGCAAGT ATCTGTTTAC TAGGCTTGGC AACTAGTCAT	1860
GTCGCTGCAA ATGAACTGA AGTAGCAAAA ACTTCGCAGG ATACAACGAC AGCTTCAAGT	1920
AGTTCAGAGC AAAATCAGTC TTCTAATAAA ACGCAAACGA GCGCAGAAGT ACAGACTAAT	1980
GCTGCTGCCC ACTGGGATGG GGATTATTAT GTAAAGGATG ATGGTTCTAA AGCTCAAAGT	2040
GAATGGATT TTTGACAACTA CTATAAGGCT TGGTTTATA TTAATTCAGA TGGTCGTTAC	2100
TCGCAGAATG AATGGCATGG AAATTACTAC CTGAAATCAG GTGGATATAT GGCCCAAAAC	2160
GAGTGGATCT ATGACAGTAA TTACAAGAGT TGGTTTATC TCAAGTCAGA TGGGGCTTAT	2220
GCTCATCAAG AATGGCAATT GATTGGAAT AAGTGGTACT ACTTCAAGAA GTGGGGTTAC	2280
ATGGCTAAAA GCCAATGGCA AGGAAGTTAT TTCTTGAATG GTCAAGGAGC TATGATGCAA	2340
AATGAATGGC TCTATGATCC AGCCTATTCT GCTTATTTTT ATCTAAAATC CGATGGAAT	2400
TATGCTAACC AAGAGTGGCA AAAAGTGGGC GGCAAATGGT ACTATTTCAA GAAGTGGGGC	2460
TATATGGCTC GGAATGAGTG GCAAGGCAAC TACTATTTGA CTGGAAGTGG TGCCATGGCG	2520
ACTGACGAAG TGATTATGGA TGGTACTCGC TATATCTTTG CGCCCTCTGG TGAGCTCAA	2580
GAAAAAAAAG ATTTGAATGT CGGCTGGGTT CACAGAGATG GTAAGCGCTA TTTCTTTAAT	2640
AATAGAGAAG AACAAAGTGG AACCGAACAT GCTAAGAAAG TCATTGATAT TAGTGAGCAC	2700
AATGGTCGTA TCAATGATTG GAAAAAGGTT ATTGATGAGA ACGAAGTGA TGGTGTCATT	2760
GTTCGTCTAG GTTATAGCGG TAAAGAAGAC AAGGAATTGG CGCATAACAT TAAGGAGTTA	2820
AACCGTCTGG GAATTCCTTA TGGTGTCTAT CTCTATACCT ATGCTGAAAA TGAGACCAT	2880
GCTGAGAGTG ACGCTAAACA GACCATTGAA CTTATAAAGA AATACAATAT GAACCTGTCT	2940
TACCTTATCT ATTATGATGT TGAGAATTGG GAATATGTAA ATAAGAGCAA GAGAGCTCCA	3000
AGTGATACAG GCACTTGGGT TAAATCATC AACAAGTACA TGGACACGAT GAAGCAGGCG	3060
GGTTATCAAA ATGTGTATGT CTATAGCTAT CGTAGTTTAT TACAGACGCG TTTAAAAAC	3120
CCAGATATTT TAAACATGT AAAGTGGTA GCGGCCTATA CGAATGCTTT AGAATGGGAA	3180
AACCTCAT TATCAGGAAA AAAAGGTTGG CAATATACCT CTCTGAATA CATGAAAGGA	3240
ATCCAAGGGC GCGTAGATGT CAGCGTTTGG TATTAAGCGA TGATTGAAA GAGGATGTC	3300

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ATAGTAGCAC CCTCTTTTC TTTGTTTAT GATAGTTCAT CCTCGAGTAA ATTCAAGTTC	3360
TTGCTCGGAA ATGAAGCTTA TATAGTAGAT TGAATATAGA CAAATACCTT GTGATTGGTA	3420
AAACATTTTA GAAATTCATT TACCTTTCCT AATCGACTTG GTTTCATCTT ATTTCAATCT	3480
ATTATAGTAT TGGGGAATTT CTTCAAACCA CATCAGCTTG GTCAGTTCCTA CCTGCGACCT	3540
CAAAACTTGT GCTTTGGTCA AGCTGGGTTT AGTTTCCTAG TTTGCTGATG GATTTCATT	3600
GACTATAAGC ATCCAACCCCT CTTTTGTCT TCTAAAGAAT TCTTAAATTA TCAGTCTATT	3660
GCAACTTTTC TCATATAAGT TCTTTGTCTT GCTATTGGTT TTCCTTAGTA GTATACTAAG	3720
GTAGTAATCA TTAAGAAGTG GTTACAAAA ATAATGAATG AGGTAAAGAA AATGGTAGAA	3780
TTGAAAAAAG AAGCAGTAAA AGACGTAAAC TCATTGACAA AAGCAGCGCC GG	3832

(2) INFORMATION FOR SEQ ID NO: 93:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 10690 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 93:

TGAAAAAATC CTCATGAACC TGGCGCCAAT AGACAAGTGT CTTGTTTCCC TCACCTTCCT	60
TATAGGCATG GTCAGCTGAC ACTCGATTGA AGGGTTTAAC AGAAACCTTT GTAATTTCGA	120
CAATGCAGAC AGCCTGATTT TGACTATCTA AAATGACATC GAAGGTCCCT ACTGGGGAA	180
GTGGTTCGTC TTCTAGCACA TAGAGGTCAT AGGCTGATGC TGTGCTGTC TTTTCTCCTT	240
TAAACACCAA ATCCGCTAAA AGGTCTGGTT CAACTCCAAA AGCCCAGGCA TCGATTTCAT	300
CTCCGATCAA AGGATTGATT TGCTTGATTT TATTCCACAT TTCTTGCGGT ATCATGGGTG	360
CTCCTTTGTA ATTTTTTACT TTCTTCTTTT ATGTGTTTAA GATGATCTGG ATGGTCAATC	420
TCTAAATCAA AAATCTCTGG AATAGAACTG TAGTGGATAA TGCATTGAT ACCCAACTGA	480
TTCATTTTTT GTATGAAAGA AGTATTGAGA TAGCCTGCTA CAGCAAAATC AATCTTGTTT	540
TTTCTTGCTT TATCCTGCAT ATCTCTAGC ATATCTAACA TTATTGGACT TTCCATATCA	600
TGCCATTGAC TGTTTCTCAT AGTCGCAAAA ACAAAGGAAG TCAAATCATT CATTCCAACT	660
ACAATCTTTG AAATGCCCGT TTCCAGTATA CTAGATAAGT CAAAATACGC TGACGGTAAT	720
TCAATCATCG TTCCGACTTT CCCAGTAAAA CCCTGCTGAC GCAATACTGT AATAGCTTGT	780
TTTAATTGGT CGGCATCATT GACAAAAGCA AAGATAACAG ATAGATTGGG GTTGGTTTGA	840

722

TAAACTTCTG TAACGACATG TGCTTCAGCC TGAAATTCAT CCAAACACGC CAGTAAACGC	900
CTAGTTCCCTC TATAGCCAAA CAAGGGATGC CCTTCGTCAA AAAACTCTTT AGTCCCCACT	960
AAACAATTGG CTCTGTATT CGTTAATTCA GTAAAACGAT ACCAAACTTC CTTACCTAAG	1020
TAAAAGGAGC AAATAGTATC AAGATAATCT TTCACAAATT CCTGACAACT TTGTAATAGT	1080
ATATTTTGAT TGAGCTCTCT CAATAAGTAT TCCCCACGAA TCATGCCGAC GTGGTGAAAT	1140
AGTTGAGGAT AAATTTTTC AAGAATTTT TCGCCACTAA GGGCAAGTTG ATTTCTCATC	1200
ATTCACCTTC CAATTCATGT AAGAAGTCTT GTCCAGTTCT GGAAATCCTA ATAATTCAGA	1260
CTTAACCTTC AAGACTAATG GCGATGCATT TTCTTCTGTA ATCTCTTGAA TATCCATCCA	1320
AATATATCCA AGTGAATCAT TCGCACCATC AGACACAGCT TCCGAAATCG TAACTTGAGG	1380
TGCACTCTCA TTCATTTCAA CATCATACAA GGCTATGACA TGGTGAACCA TAAAATTTTT	1440
TAACTCTTCC CTGACGAAAA CATCGTAGAT TCGAGGATTA GAGTAGCTTC TAACAGTAAA	1500
TCCCGTCTCT TCCATAACTT CTCTAGTCAG CGTTTCCGTC AGTCCTTCAC CAAGTTGCTG	1560
ACTGCCTCCA GGTAGATCAT ACCGATGTTG ATAAGGGCCT CTCGTTTTTT CAATGCAAAG	1620
TAACTTTCCA TTTTCAAAGC AAACACAGTA GACCCCAAAG TGATTTTGA TTCCCATCCA	1680
ACTCTCCTA CTTCAAAGAC CAGCCACCAT CTATTGTCAA GATTTGTCCT TGCATGGCGC	1740
TCGCTTTTCC ACTTGCTAAA AAAAGACTAA GCTCTGCTAT TTCCTCTGGC TCAATCCAGC	1800
GCTTGATTGG GGTTCACCTA GCCACCCAGT CAGCCAAACC ACCTGGTTCA AAATCCGAG	1860
CGGTTCATAGC TGTCTTGA CTCTCTGGAG CGATACCAA GACCTGAATC CCAGCTCAG	1920
CATAGCTAG AGCCAACTGC TTGGTGAAGC CAGCCAAGGC ATGCTTGGAT GAAGTATAGG	1980
CGTGACCACC TCCACCTGCT AGGCTAGAAG CAATGGAACA CATATTGATG ATGATTCCCT	2040
TTTTATTTTC CAGCATTTGT GTCAAATAAT ACCGAGTCAA CTCTACTGGA ATAATGTAGT	2100
TGATTTCAAA AATCTCTTGA ATGTCTGCG CCGTTTGTTT CAACAGTGGT TTGTAATCAT	2160
CCAAAACCTC AGCAGTATTA CACAAAACAT CCACCTGAGG GCACCAGTCA AAAATAGGTT	2220
CCAAGTCCAA GGTCAAATCT CTCTGTAAAA AGCGAAAATC ACCCTCTAAG AGTGGCTTTT	2280
CACCTTGATC AACTCCATAA ACTTGATAGC CCTTCTCTAA AAAGAGGCGA GCTTGAGCCA	2340
ATCCGATCCC TGAATCACT CCTGTAATGA GTACACGTTT AGTCATGCAC TTCTACCCAA	2400
TCCGTTGCCA AAACATCACA AACTGTCGGG CTCCACATGG AAAAACCTTC TCCTTCGCCA	2460
GAAACGTTGA TTAGGAAATA AGGTGTCATT TCAAGTGCAA GCCCATTTTG CTCGATGGTA	2520
TCAAAGAGTT GGACATAGTT TTCCGCACCT CCCCAACCAG TTCGTACATA TTTTCTCTTA	2580
GCCTTTAACC CAGGCAGGAT CTCTTCAAAT GTCATGTTTT TCTCCTTTAA TTCTACATTC	2640

723

TTCATTTAAT TATAGCAAAA AACCGCTTTA TACGGCTTTT TGAATGTGAG TTATTCAAAAC	2700
CTGCTACTAC TTACGGCAAA TTATTCCTG CAGCAAGATA AATTTTCATAC CATTCCTTTC	2760
TTGTTAAGCT AAAGTTTGCC GCTCGGCTAA CTCTCTCAA GTGCTTAGGA TTTGTTGTAC	2820
CTACGACTGC CTGCATTTTT GCTGGATAAC GCAATATCCA AGAAATGGCA ATAGTTGAAG	2880
AGGTFACTCC ATATTTAATA GCTAAACGAT CAAGTACTTG ATTTAAAGCT TGAAATTTCT	2940
CATTTCCAAC AAAATTCCTT TAAAATACC CGAATTGTAA GACAGACCAT GCTTGAATGA	3000
CCACATCGTG TAATTGGCAA TATTCAAAAA TGCTGCCATC TCGCATAGCT GCTTGACTAT	3060
CTTCCATATT AACATGAAAA GCTGATTCAA ATCCTGGAGT AAAAGCCGCA CTCAATTGTA	3120
GCTGATTAAAC AGCTAACGGC TGCTTGACAT CTTTTTTAAG CAACTCCATC ATCATAGGAT	3180
TTTGATTAGA AACTCCAAAA TCTCGAATT TACCTTGTTC ATAAAGGAGA TTAAAGGCTT	3240
CTGCTACTTG GTCAGATTCC ATCAAAGCAT CTGGTCGATG AAGGAGCAAG CTATCTAGAT	3300
GATCAATCTT CAATCTTGC AAAATACCGT CTACTGATTT TATAATATAG TCCTTAGAAA	3360
AATCAAAATA GGTAAATCTT TCAATGCGAA TGCCACATTT GGACTGAATC CACATCTTTT	3420
CTCTTAAATC TGGACGATTT TTTAGGACAA GACCTAACAG TTCTTCACAA CGACCACGAC	3480
CATAAATATC AGCCAAGTCG AAGGCATTGA TTCCAACAGA AAGTGCTGTT TCTACAAGCT	3540
CTTCAACTTC TTTTACAGAT TTATCTTTTA TTCTCATCAT TCCGAGAACA ATTTCTGATA	3600
ATTCTTTGTC ATCTTGACCA AGAGTTATGT ATCTCATCAA ATTTTCTCTC TTTAATTTCT	3660
AACATTCCTC CCTTCATTAT AAAAAAAC CGCTTTGCAA CGACTTTTG ACTATACTTC	3720
ACTCCATTTT ATCTTCTTAA ACCCACGGAA CAAGACAAAG ATTCCAATAA AGAGGACAGC	3780
TAAAGGAATA ACTTTTGTA GAAAAACATT TGAAATCCC ATCCACTCAT AATAACGGAG	3840
CAGAGAACCC ACCACAAGAT GGGCAATAAT CATACTGACA AATGGACGAA AGACCGCTTC	3900
TTTCCAATTC CAAATACCGA TAACTAGCGA AATCGTAAAG ACAGACAAAC TATCCCAGGG	3960
AGCCGGAATA TAAAAGGCTC CTCTTTGTAT GAAGCTTGCC ATTCCTACAT ATCCTAAAC	4020
AACTAGAAGA ACTATAGTCC CAACAACAAT GTAAGTGCCA ATTTTCATTT TAGGAGAATC	4080
TTGGACTAAA CTCTTCGTA AAATTGTGGC CACAAGTCCA AATCCAATCA GAAAAATAAG	4140
AAGTTGCCCT AAAAATGTGA GCAAATTGAC TGTTAAGAGA GGACCTTTAG AAAAATCACT	4200
TAGTAGTTGA TAATAACGTA ATACCGCCAG GACAAGAATT GCGTCAAAA GGGACTCTTT	4260
GATAGAAGTC CGAGGTGCTC CTTGAGAAT CTCTTTCATT ATTTTTTTAG GATTCTTACC	4320
TAGATAATCC TCTGCACTCA TGCCATCTCG TTCTGCTTCT GAGAAATCTA GCATCATCAA	4380

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ATAGATCTGC TCTCTGAGAT AGTCTTCATC ATAGAGAAAT CCAGCAAGAT TAAAACTTTC	4440
CCACAACATCC TCAAAATACT TTTGATTCTC CTCAGAAAAC TCATGTAGCA AAGCGCTTGT	4500
TTCTTCGTAA TACTTCATTT TCTTCATGGT TTAACCCCCA TTCTTAATCC CTTCTACTTT	4560
TTGACTCAAA TCGTCCCATT GTTGCCAAAA GACTGAGACA CGCTCTTCTC CTTCTTTCAT	4620
TAATGAAAAA TACTTCCGAT CTGGACCATC TGGCGACGGG CGCATGTCGC CTCTTATCCA	4680
TTGATTTTTT TCTAACTTTT GCAACAAAGG ATAAATAGTT CCTGGAACGA TAGTATCAAA	4740
TCCAGCCTCT CGCAAAGTCT GAACCAACTC ATAACCATAC CGCTCTTTTT GACCAATCAT	4800
ATCCAAGACA CAACCTTCAA GAACACCTTT TAATAGCTGA GTTCTTTTCA TCACCTCTCC	4860
CTTCTAATCT ATTTTGTAA ACCTACTAGT GACTTCACCT ATAGTATATC ACTTCTACAC	4920
TAGTTTGTA AGCATAATAG TTAATACTCT TCGAAAATCT CTTCAAACCA CGTCAGCGTC	4980
GCCCTACCGT ATGTATGGT ACTGACTTCG TCAGTTTCAT CTACAACCTC AAAACATGT	5040
TTTGAGCTGA CTTCGTCAGT TTCATCTACA ACCTCAAAAC AGTGTTTTGA GCTGACTTCG	5100
TCAGTTTCAT CTACAACCTC AAAACAGTGT TTTGAGCTGA CTTCGTCAGT TTCATCTACA	5160
ACCTCAAAAA CATGTTTGA GCTGACTTCG TCAGTTTCGT CTACAACCTC AAAACAGTGT	5220
TTTGAGCAAC CTGCGGCTAG CTTCTAGTT TGCTCTTGA TTTTCATTGA GTATAAATAA	5280
AAAAACAGAA CTAGCCTGAA CTAGTCCTGT CTACTTTTAC CCAATCACAC TTCCATTTGG	5340
TACAGCTGGA TCAACTGTGA GAAGGGTTAA TTTGCCATCA TGTTTCAGCTG AGAGAATCAT	5400
ACCCTGGCTG ACATATTTTT TCATCATTTT ACGTGGTTTG AGGTTAGCAA CGATTTGAAC	5460
TTTCTTGCCG ACCAATTCCT GTTCATTTGG ATAGTATTTT GCAATTCCTG AAAGAATCTG	5520
ACGATCTTCT CCATCACCAG CATCCAAGCG GAATTGAAGC AACTTATCTG AACCTTCTAC	5580
TTTAGACACT TCTTTGACTT CTGCGACACG GATTTCAACC TTGTCAAAGT CTTCAAACCT	5640
GATTTTCATCC TTGTTTAGTT TGAGCTCAAC TTCGTCCGGA TTCCATTCTT TTTGACTGC	5700
TGGTTTATTG CCTTCCATTT GTTCCTTGAT ATAGGCGATT TCTTCTTCCA TATTTAGACG	5760
TGGAAAGATA GGTGTTCCCT TGGCAACTAC AGTCACATCT GCTGGGAAGT CAGCCAAACT	5820
CAAGTTTTCA AGACTAGAAA CTTCTTCCAA ACCAAGTTGA GTCAAAACTG CACGACTACT	5880
TTCCATCATA AATGGTTCAA TCAAGTGAGC AACTACACGA ATGCTGGCTG CCAAGTGGCT	5940
CATGACACTT GCCAATTGGT CACGAAGAGC TTCATCCTTG GCCAAGACCC ATGGTGCGGT	6000
CTCATCGATG TATTTATTGG TACGAGAGAT CAGAGTCCAG ACTGCTTCAA GCGCACGTGG	6060
ATAGTCAACT GCTTCCATGT GTGTATGGAA GTCTGCGATT GATTGTWCTG CAACCTCAGC	6120
AAGAACATGA TCATATTCAG TCACACCTTC TACATAGGCA GGGATTTGTC CATCAAAGTA	6180

725

CTTATTAATC ATGGAAACCG TACGGTTAAG GAGGTCCCCA AGGTCATTAG CCAATTCATA	6240
GTTGATACGG CCGACATAGT CTTCAGGAGT AAAGGTTCCG TCTGAACCAA CTGGAAGGTT	6300
ACGCATGAGG TAGTAACGAA GTGGATCTAG TCCATAACGC TCTACCAACA TTTCAGGGTA	6360
AACGACATTC CCTTTTGACT TAGACATTTT TCCGTCTTTC ATGACAAACC AACCATGGGC	6420
AATCAAACGA TCAGGTAATT TAACATCCAA CATCATAAGA AGGATTGGCC AGTAGATAGA	6480
GTGGAAGCGA AGGATATCTT TTCCTACCAT ATGGAAGACT GTTCCATTCC AGAACTTGTC	6540
AAAGTTACCA TGTTCGTCTT GAGCGTAGCC AAGAGCTGTC GCATAGTTAA GAAGGGCATC	6600
AATCCAAACG TAGACAACGT GTTTTGATT TGATGGGACA GGCACCTCCC ATGTAAAGGT	6660
TGTACGAGAT ACCGCCAAAT CTTCCAAGCC TGGCTCGATG AAGTTGCGTA GCATTTTCATT	6720
AAGGCGACCA TCTGGCGTGA TAAATTCAGG ATGAGCTTTG AAAAATTCGA CCAAACGGTC	6780
TTGGTATTG CTAAGGCGAA GGAAGTATGA TTCTTCAGAA ACCCATTCAA CCTCATGACC	6840
TGATGGAGCA ATACCACCAG TCACATTTC AGCTTCATCA CGGAAAACCT CTGCCAGCTG	6900
GCTTCTGTGA AAGAATTCCT CGTCTGATAC TGAATACCAA CCAGAGTATT CACCCAAGTA	6960
GATATCATCT TGAGCAAGTA AGCGTTCAAA GACTTGTGCG ACAACTTTTT CATGGTAGTC	7020
ATCAGTTGTA CGGATAAATT TATCGTATGA GATATCTAGT AATTGCCAGA GTTCTTTAAC	7080
TCCAACCGCC ATTCCATCAA CATAGGCTTG AGGTGTAATA CCAGCTTCTT CCGCTTTCTG	7140
CTGGATTTTC TGACCATGTT CATCAAGACC TGTCAGATAA AATACATCGT AGCCCATCAG	7200
GCGTTTGTA CGTGCTAGGA CATCACATGC GATAGTTGTG TAGGCAGAAC CGATATGAAG	7260
TTTCCCAGAT GGATAGTAAA TCGGCGTTGT AATATAAAAA TTTTTTTCAG ACATAATTTT	7320
TCCTTTCCAG GCAAATGAAA CCTGTTTTTC TAACACTTCA TTATATCACA TTTTAAATGA	7380
ATTTCAATAG GGAAATCCAT ACAAAAACAA GATAGACGAG TGTCCATCTT GTTGATCTCA	7440
TTCATAACGA AGGGCTTCAA TTGGATCAAG TTTCGATGCC TTGTTGGCTG GCAAGACTCC	7500
AAAAATCATA CCAACACTAG CCGAAACTGC AAGACTAAAT AGGGCGACTG GGATTGATAC	7560
TCCAACCTCT ATACCTTCTA TTAAACCTTG CAGTAACAAA CCTGCTAAGg CAGTTAAACC	7620
ACTTGCAATT GTCAAGCCAA TTAAGCCACC TAACAAGGTC AAAATCATGG ATTCAATCAA	7680
AAACTGAATT AAAATATTGG CACGTGTTGC ACCCAAAGCC TTACGAAGAC CAATCTCAG	7740
AGTGCGCTCT GTCACCGAAA CCAGCATGAT GTTCATGACA CCAGTTCCTC CAACAAAGAG	7800
AGAAATCCCT GCGATGGAAC TAATAATCGT CGTCATAAAA CTAAACGATT GTTGAATTTT	7860
TGCAAATACA ACGGACTCAT CTGCCACCTG GTATTCTCCC TGTGTGAAGC CTGCAAGCTC	7920

726

TGTCATTTTT	CGTGCCAGTT	CTGGACCCAG	AGTTGGGGTT	AAACTGGTAT	CATTCACTCG	7980
AAAGACAATA	TTAGCTATTT	CATCTACATT	AAAATTCGCA	GCAAGGGAGA	TATTGGTAGT	8040
AATAGGCAAG	CCACCAAACC	CATATATTTT	TGATCTTTTA	GCCTCCGGAC	TAGTATAAAC	8100
CCCAATGACC	CGGTAATAA	ATCCATTGAC	TTCTACAACC	TTGTTAATAG	CCTCTTGAGG	8160
AGATTCAAAT	AAACTAATGG	ACAATTCCTC	ATCTAGCAAA	ATGACACTTG	CAAACCTCTT	8220
GAAATCTTGC	TCTCTCAGAC	TACGACCTGC	AATAATTTCA	TTCTTAACAG	CGTCCATGTA	8280
AGTTCTGTTT	CCACCTGTCA	AATTAGCATT	CTCAACCTTT	TTATCTTGAT	AGGTCAAGAT	8340
GGCATTCGTT	GAATTGGTTA	CATAGTAACT	ATCCACTCCC	TTCAGTTTAG	CTGCCTCTTG	8400
GACCCAGGAT	TCTTGCGGTT	TTGGCGGTTT	AACAGGAACT	TCCTCTTCCT	TTCCAGAAAC	8460
CGTAAAAGCT	GATTGTTTCT	GAGTAAAAGA	CCCGTCTTTA	CTTTTTTTAG	GAGAGAAAAA	8520
GACGCTAATA	TTTTTCTGAG	ATTTAGTCAT	ATCTTTATTG	ACTTGACGAG	ATAGGGAATC	8580
ACCCAAAGCC	ATAATCACAA	CAACTGATGA	AACACCGATA	ATAATCCCAA	TCATAGTAAG	8640
CAAAGAACGC	ATCTTGTGAG	CCATGATAGA	TGAAAAGGCA	AATTCAGAT	TCTGCATCTT	8700
AGTTTTCTCT	CTTTCCTAAC	TGAGCACTGT	CAGACGAAAT	GACCCCATCC	CGAATGACAA	8760
TCTGACGTTT	GGCATAGGCA	GCAATCTCAG	GCTCATGCGT	TACCATGATA	ATGGTTTTTC	8820
CTTCTTTATT	CAAATCAACC	AATAATTGCA	TAATTGGTTT	ACCTGTTTTG	GTATCCAAGG	8880
CTCTGTGCG	TTCATCCGCT	AGGATAATAG	AAGGATTGTT	TACCAAGGCA	CGCGCAATGG	8940
CTACACGTTG	CTTTTGACCA	CCAGATAATT	CTGAAGGTAA	ATGGTGACTA	CGTTCGTGTA	9000
ATTCAACCTT	GTCTAAATAT	TCCTCAGCCA	ACTTGCGACG	TTTGAAGAC	GAAACTCCCTG	9060
CGTAAATCAA	GGGCAATTCT	ACATTTTGCA	GAGCATTGAG	CTTCGATAGA	AGAAAGAACT	9120
GCTGAAAGAC	AAAACCGATT	TGTTGGTTAC	GGACCTTAGC	TAGTTGTTTT	TCACCAAGCC	9180
CAGCCACTTC	TTGACCTTCA	AGATAATATT	CTCCACTGGT	TGGTGTATCC	AACATGCCAA	9240
TCGTATTTCAT	CAGAGTGGAC	TTACCAGACC	CAGATGGTCC	CATGATGGCT	ACAAATTCAC	9300
CCTCATTCAC	TTCTAGATTG	ATATTTTTGA	GAACCTGCAG	TTCTTGGTCA	CCATTACGGT	9360
AACTTCTGAA	GATATTTTTT	AGACTAATTA	GTTGCTTCAT	CAGCCTTCAC	CTCTTTTCCT	9420
TCTTCCAAGG	AAGATGTTGG	ATTACTGATG	ACCTTAGCAC	CGTTCGTTAA	ACCAGAAGTG	9480
ATTTCTTGAT	TTTCTGCGTC	AGCATTTCCC	AATGAAACCT	CAACTTTTTT	AGCCTTTTGT	9540
TGTTTCATCCA	CAATCCAGAC	ATAATTTTTA	CTATCATCCA	TTACTAGACT	GCTAACAGGA	9600
ACAAGAATAG	CCTTAGTTTT	GCTTTTAACC	TCAATGTTGA	CAGAAAAACC	TTGTTTCAAA	9660
TCACCAACCT	CGCCTGTCAC	ATCAATAGTA	TAAGGGTATT	TAGAACCTGT	ATTATTCCCG	9720

727

GCTGCTGGAC TAGCTGCTTC ACCATTGTTT TTAGGATAGT CAGAAATATA GCTTAATTTC	9780
CCAGTCCATT TTTTATCAGG ATACACTTTA GAAGTAAAGC TTAATTCTTG ACCTACAGAA	9840
AGGTTGGCTA GATTGTACTC AGACAATTCT CCCTTGACTT GTAAATTTTC ATTGCTGACA	9900
ATATGAACCA TAACTTGACT CGCCCTGTT GGAGATTTAG AAACATTGCT ATTGACTTCG	9960
ACCACAGTTC CCTCTAGGGT ACTGAGAACA GTTGTTCAT CCAATTGACT TTGAGCCTTG	10020
CTTAATTGCG CCGCAGCATC TGCACGCGCA TCACGGGCAT CACCCAATTG AGCGTCAATA	10080
GAAGCAACAG AATTTCCAGC CACTGGAGTT GGGCTTTGCA CCGTTGCATC TTCCTCCTCT	10140
ACTGGCGCTG GTAAGTGTGG AGCCGGAGCT GAAGCGGCTT CATTTCTGTC TTGATTGAGT	10200
TCATTGATAT GACGATCTGC CCTAGCTACT GCTCGACTAG CTGAATCATA GGCCGCCTGC	10260
GCTTCTGAAC TACTGTACTT GACTAAAGCC TGCCCTTCGC TGACCTTATC GCCCACAGAA	10320
ACAAGGATTT CATCTAAATC ACCCTTACTA GCATCAAAAT AAACATATTG TTCATTTTTT	10380
GCTGTTACTG TCCCTGACAA TAAAACAGAG GAGGCCACGC TTCCTTCCTT GGCAACAACA	10440
AGATGAGTAG GCTCATCTTT TAGAGCAGTC TGAGAAGGTT GTCTAAAGAG TAAAATCCCC	10500
CCAGCACCCA ATACAACCTAC ACTCGCAGCA CCGATTGCTG CATAAGTTG CCACTTTTTA	10560
GCTTTACCAT TCTTTTCTT CATAATGAAA CTCCTTTCT TTTTACAAT ACTTTGCTAT	10620
TATACCAAAT TTCCCTCCAG CAAACAATAC AGTTCAGGAT TAAACAATCG TTCGGAATTT	10680
TGCTTTTCGG	10690

(2) INFORMATION FOR SEQ ID NO: 94:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 8195 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 94:

GAGAAAGCGC CCACGTTTCC CCGAAGGGAG AAAGCGGAC AGGTATCCCG TAAGCGGCCA	60
GGGTCGGAAC AGGAGAGCGC AACGAGGGAG CTTCCAGGG GGAAACGCCT GGTATCTTTA	120
TAGTCCTGTC GGGTTTCGCC ACCTCTGACT TGAGCGTCGA TTTTGTGAT GCTCGTCAGG	180
GGGGCGGAGC CTATGGAAAA ACGCCAGCAA CGCGGCCTTT TTACGGTTCC TGGCCTTTTG	240
CTGGCCTTTT GCTCACATGT TCTTTCCTGC GTTATCCCCT GATTCTGTGG ATAACCGTAT	300
TACCGCCTTT GAGTGAGCTG ATACCGCTCG CCGCAGCCGA ACGACCGAGC GCAGCGAGTC	360

728

AGTGAGCGAG GAAGCGGAAG AGCGCCCAAT ACGCAAACCG CCTCTCCCCG CGCGTTGGCC	420
GATTCATTAA TGCAGCTGGC ACGACAGGTT TCCCGACTGG AAAGCGGGCA GTGAGCGCAA	480
CGCAATTAAT GTGAGTTAGC TCACTCATTA GGCACCCAG GCTTTACACT TTATGCTTCC	540
GGCTCGTATG TTGTGTGGAA TTGTGAGCGG ATAACAATTT CACACAGGAA ACAGCTATGA	600
CaTGATTACG AATTCGAGCT CGGTACCCGG AAAATCCAGA AAATGCTTGA AAAAAATCCT	660
AGAAGATGGT ATAATACTAA ATTGTAAGGG TTATCACATA TAACTCAAAA AAAGAAAGAA	720
CAAAAGGAGA GTCAAACTAT GGCTTCTAAA GATTTCACG TAGTGGCAGA AACAGGTATT	780
CACGCACGTC CAGCAACATT GTTGGTACAA ACTGCTAGCA AATTTGCTTC AGATATCACT	840
CTTGAGTACA AAGGTAAATC AGTTAACCTT AAATCAATTA TGGGTGTTAT GAGTCTTGGT	900
GTTGGCCAAG GTGCTGACGT AACTATCTCA GCTGAAGGTG CAGATGCAGA TGACGCTATC	960
GCTGCAATCT CAGAAACAAT GAAAAAGAA GGATTGGCAT AAGGGAAATG ACAGAAATGC	1020
TTAAAGGAAT CGCAGCATCT GACGGTGTG CAGTTGCAAA AGCATATCTA CTCGTTGAGC	1080
CGGATTTGTC ATTTGAGACT ATTACAGTCG AAGATACAAA CGCAGAAGAA GCTCGCCTTG	1140
ATGCCGCTCT ACAGGCATCA CAAGACGAGC TTTCTGTTAT TCGCGAGAAA GCAGTAGGTA	1200
CGCTCGGTGA AGAAGCAGCT CAAGTTTGTG ATGCTCACTT AATGGTCTT GCTGACCCAG	1260
AAATGATCAG CCAAAATCAAG GAACTATCC GTGCGAAGAA AGTGAATGCA GAAGCAGGTC	1320
TGAAAGAAGT TACAGATATG TTTATCACTA TCTTTGAAGG CATGGAAGAC AACCCATACA	1380
TGCAAGAACG CGCAGCGGAT WCCGCGACG TGACAAAACG TGTATTGGCA AACCTTCTTG	1440
GTAAAAAAT GCCAAACCCA GCTTCTATCA ATGAAGAAGT GATTGTGATT GCGCATGACT	1500
TGACTCCTTC AGATACAGCT CAATTGGACA AAAACTTTGT AAAAGCTTTT GTAACCAACA	1560
TTGGTGGACG TACAAGCCAC TCAGCTATCA TGGCACGTAC ACTTGAAATT GCTGCTGTAT	1620
TAGGTACAAA TAACATCACT GAAATCGTTA AAGACGGTGA CATCCTTGCT GTTAACGGGA	1680
TCACTGGAGA AGTGATTATC AACCCACAG ATGAACAAGC GGCAGAATTT AAAGCAGCTG	1740
GTGAAGCCTA TGCGAAACAA AAAGCTGAAT GGGCACTTTT GAAAGATGCT CAAACAGTGA	1800
CTGTGACGG TAAACACTTC GAGTTGGCTG CTAATATCGG TACTCCAAA GACGTTGAAG	1860
GTGTTAACAA CAACGGTGCA GAAGCTGTTG GACTTTACCG TACAGAGTTC TTGTACATGG	1920
ATTCTCAAGA CTCCCAACT GAAGATGAGC AGTATGAAGC ATACAAGGCT GTTCTTGAAG	1980
GAATGAACGG TAAACCTGTT GTCGTTGCTA CAATGGATAT CGGTGGAGAT AAGGAACTTC	2040
CTTACTTCGA TATGCCTCAC GAAATGAACC CATTCCTTGG ATTCCGTGCT CTTCGTATCT	2100
CTATCTCTGA GACTGGAGAT GCTATGTTCC GCACACAAAT CCGTGCTCTT CTTCGTGCGT	2160

729

CTGTTACCGG TCAATTGCGT ATCATGTTCC CAATGGTTGC GCTCTTGAAA GAATTCCGTG	2220
CAGCGAAAAGC AGTCTTTGAT GAAGAAAAAG CAAACCTTCT TGCTGAAGGT GTTGCAAGTTG	2280
CGGATAACAT CCAAGTTGGT ATCATGATCG AGATTCCTGC AGCGGCTATG CTTGCAGACC	2340
AATTTGCTAA AGAAGTTGAC TTCTTCTCAA TTGGTACAAA CGACTTGATC CAATATACAA	2400
TGGCAGCAGA CCGTATGAAC GAACAAGTTT CATACCTTTA CCAACCATAC AACCCATCAA	2460
TCCTACGCTT GATTAACAAT GTGATCAAAG CAGCTCACGC TGAAGGTAAA TGGGCTGGTA	2520
TGTGTGGTGA GATGGCTGGT GACCAACAAG CTGTTCCACT TCTTGTCTGA ATGGGCTTGG	2580
ATGAGTTCTC TATGTCAGCA ACATCTGTAC TTCGTACACG CAGCTTGATG AAGAACTCG	2640
ACACAGCTAA GATGGAAGAG TACGCAAACC GTGCCCTTAC AGAATGCTCA ACAAATGGAAG	2700
AAGTTCCTGA ACTTCAAAAA GAATACGTTA ATTTTGATTA ATCGAAAAGT CCCTGCAACT	2760
CAGTTACAGG GATTTTTTGG ATATTTTAAA AAGAATTTTC AAGAAAATCT TTCTTATAGA	2820
AAGTCCAACC TTGAAAAAGT AGTGGTCAGA ACAAAAAATA CTTAAATGGT TCATAAAAT	2880
CTTGACAAGT TGGATATTTA GGAGTAAACT ATTAACCACT TAAGTAATAG AGAGGAGTTT	2940
CTGCAATTTA GAAATGAATT GCAACTAGAA ATATCAAATA GAAAGAGAGT TTCGATGAAA	3000
ATTAAATAAGA AATACCTTGT TGGTTCCTCG GCACTTTGAT TTTAAGTGTT TGTCTTACC	3060
AGTTGGGACT GTATCAAGCT AGAACGGTTA AGGAAAATAA TCGTGTTCCT TATATAGATG	3120
GAAAACAAGC GACGCAAAAA ACGGAGAATT TGACTCCTGA TGAGGTTAGC AAGCGTGAAG	3180
GAATCAATGC TGAGCAAATC GTCATCAAGA TAACAGACCA AGGCTATGTC ACTTCACATG	3240
GCGACCACTA TCATTATTAC AATGGTAAGG TTCCTTATGA CGCTATCATC AGTGAAGAAT	3300
TACTCATGAA AGATCCAAAC TATAAGCTAA AAGATGAGGA TATGTTAAT GAGGTCAAGG	3360
GTGGATATGT TATCAAGGTA GATGGAAAAT ACTATGTTTA CCTTAAGGAT GCTGCCACG	3420
CGGATAACGT CCGTACAAAA GAGGAAATCA ATCGACAAAA ACAAGAGCAT AGTCAACATC	3480
GTGAAGGTGG AACTCCAAGA AACGATGGTG CTGTTGCCTT GGCACGTTTC CAAGGACGCT	3540
ATACTACAGA TGATGGTTAT ATCTTTAATG CTTCTGATAT CATAGAGGAT ACTGGTGATG	3600
CTTATATCGT TCCTCATGGA GATCATTACC ATTACATTCC TAAGAATGAG TTATCAGCTA	3660
GCGAGTTGGC TGCTGCAGAA GCCTTCCTAT CTGGTCGAGG AAATCTGTCA AATTCAAGAA	3720
CCTATCGCCG ACAAATAGC GATAACACTT CAAGAACAAA CTGGGTACCT TCTGTAAGCA	3780
ATCCAGGAAC TACAAATACT AACACAAGCA ACAACAGCAA CACTAACAGT CAAGCAAGTC	3840
AAAGTAATGA CATTGATAGT CTCTTGAAAC AGCTCTACAA ACTGCCCTTG AGTCAACGAC	3900

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ATGTAGAATC TGATGGCCTT GTCTTTGATC CAGCACAAAT CACAAGTCGA ACAGCTAGAG	3960
GTGTTGCAGT GCCACACGGA GATCATTACC ACTTCATCCC TTA CTCTCAA ATGTCTGAAT	4020
TGGAAGAACG AATCGCTCGT ATTATTCCCC TCGTTATCG TCAAAACCAT TGGGTACCAG	4080
ATTCAAGGCC AGAACAACCA AGTCCACAAC CGACTCCGGA ACCTAGTCCA GGCCCGCAAC	4140
CTGCACCAA TCTTAAATA GACTCAAATT CTTCTTTGGT TAGTCAGCTG GTACGAAAAG	4200
TTGGGGAAGG ATATGTATTC GAAGAAAAGG GCATCTCTCG TTATGTCTTT GCGAAAGATT	4260
TACCATCTGA AACTGTTAAA AATCTTGAAA GCAAGTTATC AAAACAAGAG AGTGTTTCAC	4320
ACACTTTAAC TGCTAAAAA GAAATGTTG CTCCTCGTGA CCAAGAATTT TATGATAAAG	4380
CATATAATCT GTTAAGTGA GTCATAAAG CCTTGTTTGA AAATAAGGGT CGTAATCTG	4440
ATTTCCAAGC CTTAGACAAA TTATTAGAAC GCTTGAATGA TGAATCGACT AATAAGAAA	4500
AATTGGTAGA TGATTATTTG GCATTCCTAG CACCAATTAC CCATCCAGAG CGACTTGGCA	4560
AACCAAAATC TCAAATTGAG TATACTGAAG ACGAAGTTCG TATTGCTCAA TTAGCTGATA	4620
AGTATACAAC GTCAGATGGT TACATTTTGG ATGAACATGA TATAATCAGT GATGAAGGAG	4680
ATGCATATGT AACGCCTCAT ATGGGCCATA GTCAGTGGAT TGGAAAAGAT AGCCTTTCTG	4740
ATAAGGAAAA AGTTGCAGCT CAAGCCTATA CTAAAGAAAA AGGTATCCTA CCTCCATCTC	4800
CAGACGCAGA TGTTAAAGCA AATCCAAGT GAGATAGTGC AGCAGCTATT TACAATCGTG	4860
TGAAAGGGGA AAAACGAATT CCACTCGTTC GACTTCCATA TATGGTTGAG CATACAGTTG	4920
AGGTTAAAAA CCGTAATTTG ATTATTCCTC ATAAGGATCA TTACCATAAT ATTAAATTTG	4980
CTTGGTTTGA TGATCACACA TACAAAGCTC CAAATGGCTA TACCTTGGAA GATTTGTTTG	5040
CGACGATTAA GTACTACGTA GAACACCCTG ACGAACGTCC ACATTCTAAT GATGGATGGG	5100
GCAATGCCAG TGAGCATGTG TTAGGCAAGA AAGACCACAG TGAAGATCCA AATAAGAACT	5160
TCAAAGCGGA TGAAGAGCCA GTAGAGGAAA CACCTGCTGA GCCAGAAGTC CCTCAAGTAG	5220
AGACTGAAAA AGTAGAAGCC CAACTCAAAG AAGCAGAAGT TTTGCTTGCG AAAGTAACGG	5280
ATTCTAGTCT GAAAGCCAAT GCAACAGAAA CTCTAGCTGG TTTACGAAAT AATTGACTC	5340
TTCAAATTAT GGATAACAAT AGTATCATGG CAGAAGCAGA AAAATTACTT GCGTTGTTAA	5400
AAGGAAGTAA TCCTTCATCT GTAAGTAAGG AAAAAATAA CTAATGAAAA ATGAAAGTCT	5460
CGATAAAGAG GCTTTCATTT TTATTATGTA TATATGTAAA ATTCTTGACA AGCAATATTA	5520
AAAAGAGTAA ACTATTAAGT AGTTAATTAA CCGGTTTATT ACTTTATAGT GAATCAAATA	5580
TACTTAAGAA AAGAGGAAAG AATGAAAATT AATAAAAAAT ATCTAGCAGG TTCAGTGGCA	5640
GTCTTGCCCC TAAGTGTTTG TTCCTATGAA CTTGGTCGTC ACCAAGCTGG TCAGGTTAAG	5700

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AAAGAGTCTA ATCGAGTTkC TTATATAGAT GGTGATCAGG CTGGTCAAAA GGCAGAAAAAC	5760
TTGACACCAG ATGAAGTCAG TAAGAGGGAG GGGATCAACG CCGAACAAAT CGTCATCAAG	5820
ATTACGGATC AAGGTTATGT GACCTCTCAT GGAGACCATT ATCATTACTA TAATGGCAAG	5880
GTCCCTTATG ATGCCATCAT CAGTGAAGAG CTCCTCATGA AAGATCCGAA TTATCAGTTG	5940
AAGGATTCAG ACATTGTCAA TGAATCAAG GGTGGTTATG TTATCAAGGT AGATGGAAAA	6000
TACTATGTTT ACCTTAAGGA TGCAGCTCAT GCGGATAATA TTCGGACAAA AGAAGAGATT	6060
AAACGTCAGA AGCAGGAACA CAGTCATAAT CACGGGGGTG GTTCTAACGA TCAAGCAGTA	6120
GTTGCAGCCA GAGCCCAAGG ACGCTATACA ACGGATGATG GTTATATCTT CAATGCATCT	6180
GATATCATTG AGGACACGGG TGATGCTTAT ATCGTTCCTC ACGGCACCA TTACCATTAC	6240
ATTCCTAAGA ATGAGTTATC AGCTAGCGAG TTAGCTGCTG CAGAAGCCTA TTGGAATGGG	6300
AAGCAGGGAT CTCGTCCTTC TTCAAGTTCT AGTTATAATG CAAATCCAGC TCAACCAAGA	6360
TTGTGAGAGA ACCACAATCT GACTGTCACT CCAACTTATC ATCAAAATCA AGGGGAAAAAC	6420
ATTTCAAGCC TTTTACGTGA ATTGTATGCT AAACCCCTTAT CAGAACGCCA TGTGGAATCT	6480
GATGGCCTTA TTTTCGACCC AGCGCAAATC ACAAGTCGAA CCGCCAGAGG TGTAGCTGTC	6540
CCTCATGGTA ACCATTACCA CTTTATCCCT TATGAACAAA TGTCTGAATT GGAAAAACGA	6600
ATTGCTCGTA TTATTCCCTT TCGTTATCGT TCAAACCAAT GGGTACCAGA TTCAAGACCA	6660
GAACAACCAA GTCCACAATC GACTCCGGAA CCTACTCCAA GTCCGCAACC TGCACCAAT	6720
CCTCAACCAG CTCCAAGCAA TCCAATTGAT GAGAAATTGG TCAAAGAAGC TGTTGAAAAA	6780
GTAGCGATG GTTATGTCTT TGAGGAGAAT GGAGTTTCTC GTTATATCCC AGCCAAGGAT	6840
CTTTCAGCAG AAACAGCAGC AGGCATTGAT AGCAAACCTGG CCAAGCAGGA AAGTTTATCT	6900
CATAAGCTAG GAGCTAAGAA AACTGACCTC CCATCTAGTG ATCGAGAATT TTACAATAAG	6960
GCTTATGACT TACTAGCAAG AATTCACCAA GATTTACTTG ATAATAAAGG TCGACAAGTT	7020
GATTTTGAGG CTTTGATAA CCTGTTGGAA CGACTCAAGG ATGTCyCAAG TGATAAAGTC	7080
AAGTTAGTGG ATGATATTCT TGCCTTCTTA GCTCCGATTC GTCATCCAGA ACGTTTAGGA	7140
AAACCAAATG CGCAAATTAC CTACACTGAT GATGAGATTC AAGTAGCCAA GTTGGCAGGC	7200
AAGTACACAA CAGAAGACGG TTATATCTTT GATCCTCGTG ATATAACCAG TGATGAGGGG	7260
GATGCCTATG TAACTCCACA TATGACCCAT AGCCACTGGA TTAAAAAAGA TAGTTTGTCT	7320
GAAGCTGAGA GAGCGGCAGC CCAGGCTTAT GCTAAAGAGA AAGGTTTGAC CCCTCCTTCG	7380
ACAGACCATC AGGATTCAGG AAATACTGAG GCAAAAGGAG CAGAAGCTAT CTACAACCGC	7440

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GTGAAAGCAG CTAAGAAGGT GCCACTTGAT CGTATGCCTT ACAATCTTCA ATATACTGTA	7500
GAAGTCAAAA ACGGTAGTTT AATCATACCT CATTATGACC ATTACCATAA CATCAAATTT	7560
GAGTGGTTTG ACGAAGGCCT TTATGAGGCA CCTAAGGGGT ATACTCTTGA GGATCTTTTG	7620
GCGACTGTCA AGTACTATGT CGAACATCCA AACGAACGTC CGCATTCAGA TAATGGTTTT	7680
GGTAACGCTA GCGACCATGT TCGTAAAAAT AAGGTAGACC AAGACAGTAA ACCTGATGAA	7740
GATAAGGAAC ATGATGAAGT AAGTGAGCCA ACTCACCCCTG AATCTGATGA AAAAGAGAAT	7800
CACGCTGGTT TAAATCCTTC AGCAGATAAT CTTTATAAAC CAAGCACTGA TACGGAAGAG	7860
ACAGAGGAAG AAGCTGAAGA TACCACAGAT GAGGCTGAAA TTCCTCAAGT AGAGAATTCT	7920
GTTATTAACG CTAAGATAGC AGATGCGGAG GCCTTGCTAG AAAAAGTAAC AGATCCTAGT	7980
ATTAGACAAA ATGCTATCGA GACATTGACT GGTCTAAAAA GTAGTCTTCT TCTCGGAACG	8040
AAAGATAATA ACACTATTTC AGCAGAAGTA GATAGTCTCT TGGCTTTGTT AAAAGAAAGT	8100
CAACCGGCTC CTATACAGTA GTAAATGAA TGGAGCATAT TTTATGGAGA AGTAACCTTT	8160
CGTGTACTT CTCTTTTTC GAAAAACGTA ACAGA	8195

(2) INFORMATION FOR SEQ ID NO: 95:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 2004 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 95:

TTTACTAAAA GGAAAAAAGA ACTGATTCTT CAGTCCTTCA TTAATCTTAT TCCACACTAA	60
ATAGGTATGG GTAAACAGGT TGTGACCTT GGTGAATCTC GACTTCAACG TCTTCGAATT	120
CTTCTACGAT TTCTTGAGCG ATTTCATTGG CAAGTTCTTC GCTTCCGTCT TCACCTACAT	180
AGAAGGTTAC GATTTCACTG TCTTCATCCA ACATATGTTT CAAGGTTTCA GTCAATGTTT	240
GGTGCATATC AGGGTTTGAC ACAAGAATTT TTCCATCCAC CATACCTAAA TTATCGTTTT	300
CATGGATTTT TAAGCCATCG ATCGTTGTAT CACGCACGGC TGTGTGACG CTTCCGCTAA	360
CGACATCGCT AAGAGCAGCT GTCATACGCT CTTGGTTTTC TTCAATGGAC TTGCTTGGAT	420
CAAAGGCAAG AAGACTTGTC ATACCTTGAG GAAGAGTGCG AGCCTCTACC ACTACCGCTG	480
GTTGCTCCAA AACTTCTGCC GCAGATTGAG CTGCCATGAA GATGTTCTTG TTGTTTGGCA	540
AGAAGATGAT GTTACGGGCA TTAACCTGTT CAACAGCCTT GATAAAGTCT TCTGTTGAAG	600
GGTTCATGGT TTGACCGCCT TCGATAACAT AATCCACGCC TTGAGAACAG AAGATATCTG	660

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CTAGACCTTT ACCAGCCACC ACAGCAATCA AAGCATACTC TTTTCTCTCA GCCGACTTGA	720
TAACTTGAGT AGCTTCTTTC TCAACCTGTG CTTCTGTGTG GTTACGCATA TTGTCAAATT	780
TTACCTTGAC CAAGCTACCA TATTTGAGAC CTTCTTGCAT AACAAGTCCT GGATCTTCTG	840
TATGAACATG GACTTTGACA ATTTTCATCAT CGTTAACAAC AAGGAGAGAA TCTCCAAGCT	900
CATCCAAGTA GTTACGGAAT TCATCGTAGT CAAAATCTTT AGCATAGGTT GGACCTTGCT	960
TAAGAGCTAC CATGATTTCA GTACAGTAAC CAAACGTGAT GTCCTCAGTC GCTACGTGAC	1020
CAGCTACAGA CTTATGATGC TCTACATTGA TCATCTCACT CATGTTGGCA GGAGTCGCTA	1080
CAAAGTCCTC AGATGCAATA TATTCGCCAG TAAGGGCTGA AAGGAAACCT TCGTAGATGA	1140
AGACCAATCC TTGACCACCT GAGTCCACAA CGCCAACCTC TTCAATACT GGAAGCATGT	1200
CTGGTGT TTT AGCTAGAGCT GTTTTAGCAC CTTCCAAGGC TCGCGCATG ACTTCAACAG	1260
CGTCATCTGT TTGCTCAGCT TTTTCTTAG CACCGATAGC AGCTCCACGA GAAACTGTTA	1320
AAATCGTTCC TTCAACAGGT TTCATCACTG CCTTATAGGC AACTTCCACA CCTGATTGGA	1380
AGGCCAGAGC CAAGTCTTGA CCTGTTAAC CGTCTTTATC CTTGATAGCT TGGGAAAATC	1440
CACGGAAAAG CTGAGACGTA ATCACTCCTG AGTCCCACG CGCACCCATC AAAAGCCCTT	1500
TGGCAAGAAT GCTCGCTACT TCTCCAACG TAGAAGCTGG CTTGTCTGCA ACTTCTTTAG	1560
CACCATTTTC AATGGTCATT CCCATATTTG TCCCAGTATC TCCATCTGGA ACTGGAAAGA	1620
CGTTTAATGA ATTGACATAT TCAGCTTGCT TATTCAAGCG AGTTGATGCA GCCTGCACCA	1680
TTTCTTGAAA TAAGCTAGTA GTAATTTTGG ACACGGTTAT TCTCCTACAA CTTTGATATT	1740
TTGAATGTAG ACATTTACAG TCTGAGCAGT AATTCCAAGC TGGTTTTCCTA AGCTAAAGGC	1800
AACACGCTCT TGAATGTTTT TTGACACTTC ACTAATCTTT GTTCCGTAGC TTAACACGGT	1860
ATATACATCA ACTGCAATAC TGCCATCTTC GGCTGCCTTT ACGACGACAC CTTTAGAATA	1920
ATTTTCCTTA CCTAGCAGGG CTTGGAAATT ATCTTTGAGG GCATTTTAC TAGCCATACC	1980
GACCACACCA GAAATCTCAG TTGC	2004

(2) INFORMATION FOR SEQ ID NO: 96:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 11915 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 96:

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CCGGGTTGGG CTGTTGCCCC ATTAAAGCGG CACCACAGCT GGGTTCAGAA CGTCGTGAGA	60
CAGTTCGGTC CCTATCCGTC GCGGGCGTAG GAAATTTGAG AGGATCTGCT CCTAGTACGA	120
GAGGACCAGA GTGGACTTAC CGCTGGTCTA CCAGTTGTCT TGCCAAAGGC ATCGCTGGGT	180
AGCTATGTAG GGAAGGGATA AACGCTGAAA GCATCTAAGT GTGAAACCCA CCTCAAGATG	240
AGATTTCCCA TGATTATATA TCAGTAAGAG CCCTGAGAGA TGATCAGGTA GATAGGTTAG	300
AAGTGAAGT GTGGCGACAC ATGTAGCGGA CTAATACTAA TAGCTCGAGG ACTTATCCAA	360
AGTAACTGAG AATATGAAAG CGAACGGTTT TCTTAAATTG AATAGATATT CAATTTTGAG	420
TAGGTATTAC TCAGACTTAA GTGACGATAG CCTAGGAGAT ACACCTGTAC CCATGCCGAA	480
CACAGAAGTT AAGCCCTAGA ACGCCGGAAG TAGTTGGGGG TTGCCCCCTG TGAGATAGGG	540
AAGTCGCTTA GCTCTAGGGA GTTTAGCTCA GCTGGGAGAG CATCTGCCCT ACAAGCAGAG	600
GGTCAGCGGT TCGATCCCGT TAACTCCCAT TTTAGCGGGT GTAGTTTAGT GGTAATACTA	660
CAGCCTTCCA AGCTGTTGTC GCGAGTTCGA TTCCTGTCAC CCGCTTTGAA CTTTGTCTCT	720
TGTACCAAGT TTTTGACTTG GCGCGTAGC TCAGGTGGTT AGAGCGCAGC CCTGATAAGC	780
GTGAGGTCGG TGGTTCGAGT CCACTCGTGC CCATAGTGTT TAGTCCATTA CTAGGGGATT	840
GGAATATTAT CTGTTCACTA AGAGGACACG GGCTTGTTC CGTATAAACT ATTTTGAGAG	900
ATTACCCAAG TCCGGCTGAA GGGAACGGTC TTGAAAACCG TCAGGCGTGT AAAAGCGTGC	960
GTGGGTTCGA ATCCACATC CTCCTTTTAT ATTAACGCGG GATGGAGCAG CTCGGTAGCT	1020
CGTCGGGCTC ATAACCCGAA GGTGCTAGGT TCAAATCCTG CTCCGCAAT AAGGCTCGGT	1080
AGCTCAGTTG GTAGAGCAAT GGATTGAAGC TCCATGTGTC GGCGGTTGCA TTCCGTCTCG	1140
CGCCATTTAT ATATTTTGGA AGGGTAGCGA AGAGGCTAAA CGCGGCGGAC TGTAAATCCG	1200
CTCCTTCGGG TTCGGGGGTT CGAATCCCTC CCCTTCCATT TTACGGGCAT AGTTTAAAGG	1260
TAGAACTAAG GTCTCAAAA CCTTCAGTGT GGGTTCAATT CCTACTGCCC GTGTTAATAG	1320
AATTATGGCG GGTGTGGTGA AGTGGTTAAC ACACCAGATT GTGGCTCTGG CATGCGTGGG	1380
TTCGATCCCC ATCACTCGCC TATTTTATAT TGGGGTATAG CCAAGCGGTA AGGCAAGGGA	1440
CTTTGACTCC CTCATGCGTT GTTTCGAATC CAGCTACCCC AGTTACTATT TGCCGGCGTG	1500
GCGGAATTGG CAGACGCGCT GGA CTCAAAA TCCAGTGTCC GCAAGGACGT GCCGTTTGA	1560
CCCCGGCCGC CGGTATAGTA TAGTGTAGG AACGTTGTIA TTCTTCGTTT CTTTTTTATA	1620
TTATTTTGGG TATAATTATA GTTATTCAAA TTTTATTTAG ATTAAGAAAG TGTAGGGGAG	1680
TATGTCTTGT TCTATCGATT TATTAAACA TCGGTATTTG AAAAATATTA AAGAAAATCC	1740
TGAATTGTTT GTCGGAATTG AGTTGGAGTA TCCTGTTGCA AGTTTAGAAG GCGATGCTAC	1800

735

AGATGTTGAA GTTATGAAGG ATCTATTTCA TTATTTAGTT TCTACTTTGG ATCTCACCGT	1860
AGCAAAGGTA GATGATTTTG GCAATCTGAT CCAGTTAGTA GATCCGATAA GTCAGGATGC	1920
TATTTTATTT GAAGTTTCCT ATACAACGAT TGAGTTTGCA TTTGGTAAGG CTGAAACGAT	1980
TCAAGAGGTC GAAAATCGTT TCAATAATTA TATGAATGTA ATTCAGAGAA AGTTAGCTGA	2040
ATCAAATCAT GCTATTGTTG GCTGTGGTAT CCATCCCAAC TGGGATAAAA ATGAGAATTG	2100
TCCAGTGGCT TATCCACGCT ATCAGATGTT GATGGATTAT TTGAATTTGA GTAGAAATAT	2160
TATTAAATCA GATTACATC ATTTCCCTGA ATATGGTACT TTTATCTGTG GGAGCCAGGT	2220
TCAGCTGGAT ATTTCAAAAA CCAACTACTT ACGGGTGATT AATGCTTTTA CTCAAATTGA	2280
AGCGGCTAAG GCTTATTTAT TTGCAAACTC TGAATTTTCG GGTGCGGATT GGGATACGAA	2340
AATTTCAAGG GATATTTTCT GGAAGAATC TATGCATGGT ATCTATCCAG AGAATGTTGG	2400
GGTCAATGCT AGACTCCTTA ATGATGAAAC TGATTTTTTT GACTATCTAA ATCAATCTGC	2460
GATTTTFACT GCGGAACGTG ATGGGCAGAC CTATTATTTT TATCCTATTC AGGCTGGGGA	2520
CTATTTGCTT ACGTCCGAAA TCCAAGCATT TGCTCTGAAT GGGGATGAGG TTATTATTTA	2580
CCCCAAGAG AAGGATTTTG AAATCATCG TAGTTACCAG TACCAAGATT TAACGACTCG	2640
AGGAACAGTT GAGTTTCGTA GTGTGTGTAC ACAGCCACTT GATAGGACTT TTGCTTCTGC	2700
AGCTTTTTCAC TTGGGATTAT TGGTTAATTT AGACAAGTTA GAAGCTTACT TAGAAACAGC	2760
ACCTTTCTTT AAAGTATTTG GTTATGATTA CAAGTCTTTA AGGAGACAAT TTTCTAAGAA	2820
AAATCTTACA GATGAGGAAG AAATACGAT TATTGAATTT TCCAAAGACT TACTCCTACT	2880
AGCTGAGGAG GGACTAGTGG TGAGAAATAA GGAAGAAATG ACCTATTTTAC AGCCTTTGAG	2940
AGAAGAATTG AGCCTATAAT TTCTCTTATA AAGGGAGAAT TTTCTGAAAA ATCATGATAT	3000
AATGGACGAG ACTATAGATA AAGGATAGAG AGTAATGACA TTAGTTTATC AATCAACGCG	3060
TGATGCCAAC AATACAGTAA CTGCCAGCCA AGCAATTTTG CAAGGTTTGG CGACGGACGG	3120
CGGTTTGT TT ACACCGGATA CTTATCCAAA GGTAGATTTG AACTTTGACA AATTGAAAGA	3180
TGCTTCTTAC CAGGAAGTTG CTAAGCTAGT TTTGTCAGCA TTTTITAGATG ACTTTACAGT	3240
TGAGGAGTTG GACTACTGTA TCAACAATGC CTACGATAGC AAATTTGATA CTCCAGCTAT	3300
TGCACCATTA GTGAAATTAG ATGGGCAATA CAATTTGGAA CTTTTCATG GTTCAACGAT	3360
TGCCTTTAAAG GATATGGCCT TGTCTATTTT GCCATACTTT ATGACGACTG CTGCTAAGAA	3420
ACATGGTTTG GAGAACAAGA TTGTTATCTT GACAGCGACA TCTGGTGACA CGGGGAAAGC	3480
TGCTATGGCG GGGTTTGCGA ATGTGCCTGG TACTGAGATT ATCGTCTTTT ATCCAAAGGA	3540

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TGGTGTGAGC AAGATTCAAG AGTTACAAAT GACCACTCAG ACTGGCGACA ATACTCATGT	3600
TATTGCTATT GATGGTAACT TTGACGATGC GCAAACAAAT GTGAAGCACA TGTTTAACGA	3660
CGTGGCTCTT CGTGAAAAAT TGACTIONAA CAAGTTGCAA TTTTCATCAG CTAACCTCTAT	3720
GAACATTGGT CGTCTGGTGC CACAAATTGT TTATTATGTT TATGCTTACG CTCAATTGGT	3780
TAAGACTGGT GAAATTGTAG CTGGTGAAAA GGTTAACTTC ACAGTACCAA CAGGAAACTT	3840
TGGAAATATC TTGGCTGCCT TTTATGCCAA ACAAATTGGT TTGCCAGTTG GTAAATTAAT	3900
CTGTGCTTCA AATGACAACA ATGTTTGTGAC AGACTTCTTT AAAACACGTG TCTATGACAA	3960
AAAACGTGAG TTTAAGGTAA CAACCAGCCC ATCTATGGAT ATCTTGGTAT CTTCAAACCT	4020
GGAGCGCTTG ATTTTCCATC TTTTGGGAAA TAATGCTGAA AAGACAACAG AACTTATGAA	4080
TGCCTTGAAC ACGCAAGGAC AATATAAGTT GACAGACTTT GATGCAGAGA TTTTGGACCT	4140
CTTTCGAGCT GAATATGCGA CTGAGGAAGA AACGGCAGCA GAGATCAAGC GTGTTTGTGA	4200
GTTAGATTCT TATATCGAGG ACCCTCATAC AGCTGTGTGCT TCAGCAGTTT ATAAAAATA	4260
CCAATCGGCC ACTGGAGATG TAACTAAGAC AGTGATTGCT TCAACAGCTA GTCCATACAA	4320
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GGCTTATTTA GGACTTTAAG ACAGAGGGAG CAAACTCGGT TGGGAAACCA ACTGAGTTTC	4560
TTTTCATCAG GAGGAGAGAT TGTTTAAGAA AAATAAAGAC ATTCTTAATA TTGCATTGCC	4620
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TCATTTAGGA TTGATAGCTA TTTCAGGGGT TTCAGTAGCT GGTAATATTA TCACCATTTA	4740
TCAGGCGATT TTCATCGCTC TGGGAGCTGC TATTTCCAGT GTTATTTCAA AAAGCATAGG	4800
GCAGAAAGAC CAGTCGAAGT TGGCCTATCA TGTGACTGAG GCGTTGAAGA TTACCTTACT	4860
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GGGGACGGAG AGGGATGTAG CTGAGAGTGG TGGACTGTAT CTATCTTTGG TAGGCGGATC	4980
GATTGTCTCT TTAGGTTTAA TGACTIONCT AGGAGCCTTG ATTCGTGCAA CGCATAATCC	5040
ACGCTGTCCT CTCTATGTTA GTTTTTTATC CAATGCCTTG AATATTCTTT TTTCAAGTCT	5100
AGCTATTTTT GTTCTGGATA TGGGATAGC TGGTGTGCT TGGGGACAA TTGTGTCTCG	5160
TTTGGTTGGT CTTGTGATTT TGTGGTCACA ATTAAAACCT CCTTATGGGA AGCCAACTTT	5220
TGGTTTAGAT AAGGAACGTG TGACCTTGGC TTTACCAGCA GCTGGAGAGC GACTTATGAT	5280
GAGGGCTGGA GATGTAGTGA TCATTGCCTT GGTGTTTCT TTTGGGACCG AGGCAGTTGC	5340

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TACGGCAAACG GTCATGCTGT TGGCCCGAGC AGTTGGAGAG CATGATTGGA AAAGAGTTGC	5460
TAGTTTGAGT AAACAAACCT TTTGGCTTTC TCTGTTCTC ATGTTGCCCC TGTCTTTAG	5520
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GGCTAGTCTT CTAGTGACAC TGTTTTCACT ACTGGGACC CCTATGACGA CAGGAACAGT	5640
CATCTATACG GCAGTCTGGC AGGGATTAGG AAATGCACGC CTCCTTTTAT ATGCGACAAG	5700
TATAGGAATG TGGTGTATCC GCATTGGGAC AGGATATCTG ATGGGGATTG TGCTTGCTTG	5760
GGGCTTGCCCT GGTATTTGGG CAGGGTCTCT CTTGGATAAT GGTTTTCGCT GGTATTTTCT	5820
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TATTTGGGAT TTAGACGGGA CTTTATTTGA CTCTTACGAA GCGATTTTAT CAGGGATTGA	5940
GGAGACTTTT GCTCAGTTT CTATTCCTTA TGATAAGGAG AAGGTGAGAG AGTTTATCTT	6000
CAAGTATTCG GTGCAAGATT TGCTTGTGCG GGTGGCAGAA GATAGAAATC TGGATGTTGA	6060
GGTGCTAAAT CAGGTGCGTG CCCAGAGTCT GGCTGAGAAG AATGCTCAGG TAGTTTGTAT	6120
GCCAGGTGCG CGTGAGGTGC TAGCTTGGGC AGACGAATCA GGAATTCAGC AGTTTATATA	6180
TACTCATAAG GGAACAACG CTTTTACCAT TCTCAAGGAC TTGGGGGTGG AATCCTATTT	6240
TACAGAGATT TTAACCAAGC AGAGTGGCTT TGTGCGGAAG CCAAGTCCAG AAGCGGCTAC	6300
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CAACAAAACA ACTTATACCG TACAGTATGG TGATACTTTG AGCACCATTG CAGAAGCCTT	6840
GGGTGTAGAT GTCACAGTGC TTGCGAATCT GAACAAAATC ACTAATATGG ACTTGATTTT	6900
CCCAGAACT GTTTGACAA CGACTGTCAA TGAAGCAGAA GAAGTAACAG AAGTTGAAAT	6960
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TAATCAAGTG ACCGTTGATG ATCAAACCTG TCAGGTGCA GACCTTTCTC AACCAATTGC	7080

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AGAAGTTACA AAGACAGTGA TTGCTTCTGA AGAAGTGGCA CCATCTACGG GCACTTCTGT	7140
CCCAGAGGAG CAAACGACCG AAACAACCTCG CCCAGTTGAA GAAGCAACTC CTCAGGAAAC	7200
GACTCCAGCT GAGAAGCAGG AAACACAAGC AAGCCCTCAA GCTGCATCAG CAGTGGAAAT	7260
AACTACAACA AGTTCAGAAG CAAAAGAAGT AGCATCATCA AATGGAGCTA CAGCAGCAGT	7320
TTCTACTTAT CAACCAGAAG AGACGAAAAT AATTTCACA ACTTACGAGG CTCCAGCTGC	7380
GCCCATTAT GCTGGACTTG CAGTAGCAAA ATCTGAAAAT GCAGGTCTTC AACCACAAAC	7440
AGCTGCCCTT AAAGAAGAAA TTGCTAACTT GTTTGGCATT ACATCCTTTA GTGGTTATCG	7500
TCCAGGAGAC AGTGGAGATC ACGGAAAAGG TTTGGCTATC GACTTTATGG TACCAGAACG	7560
TTCAGAAATA GGGGATAAGA TTGCGGAATA TGCTATTCAA AATATGGCCA GCCGTGGCAT	7620
TAGTTACATC ATCTGGAAAC AACGTTTCTA TGCTCCATTC GATAGCAAAT ATGGGCCAGC	7680
TAACACTTGG AACCCAAATGC CAGACCGTGG TAGGTGACA GAAAATCACT ATGATCACGT	7740
TCACGTTTCA ATGAATGGAT AAACCCGACT TGATAACATC ATTTTGACGA ATGAGATCTA	7800
GCTTTCGTGA TGGAAAGCGA TTCTCGTTCG TTTTCTCTT GTCATACTCT TCGAAAATCT	7860
CTTCAAACCA CGTCAGTTTT ATCTGAACT TCAAAGCTGT GCTTTGAGCA ACCTGCGACT	7920
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AATTAGTCAA ATATTGATAA ATCAATAAAA AGAGAGGGGA AGAAATGCTA GAGATTCAAG	8100
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AAATTTTGGA AACGGAAGGT TTGGTGGAGC GTCATCGTAA TCCTGAAAAT CAGCGGGAAG	8340
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AGTATTGCCA CGCAATCAGA TGCGACTAGT CGTGTATTTA ATATGGAAAA GGAAGAATTG	8640
GCTCATCCGT CAGTAAGTTC ATTGTTCAAA AATCAAGGAA TTTATAAGGC TCTGCTAGGA	8700
GTCTTCTCT TGTATGTCAT TTATTTCTCA CAGAATTTAG AAATTGTGAC TATTTTGTG	8760
TTATTTGTGA TTGGTGCTGC GACTTACGGC TCTTTAACAG CGGATAAAAA AATTATTTTG	8820
AAACAAGGTG GATCAGCTAT TTTGGCCTTG ATTAGTATTT TACTCTTTAA ATACACTTGA	8880

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AGGTCGATTC TAATCTCGCT AATCCTTTTT AATCCAGAAT AAGGGAAATA TGTATACTT	8940
GTTTTTAAGA AAAAAGTCTC ATTGAATTGG TTTTGAGGAG TTAGAAATGA AAGTATTAGT	9000
GACAGGTTTT GAGCCCTTTG GAGGGGAAAA GGGCAATCCA GCTTTGGAGG CCATTAAAGG	9060
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CAAATCTGCT CAAGTATTGG AAGAAGAGAT GAATCGTTAT CAACCTGACT TTGTCCCTTG	9180
TATTGGGCAA GCTGGTGGA GAACTAGTTT GACACCTGAA CGAGTGACCA TTAATCAAGA	9240
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TATAAGGTAG GAGTGAAAAA CTAGCAATGC CAAAGGTAAT CCAATTGAGG AAGTACCAAG	9780
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TAGTTTTTAG GATTCGTCTT GGTGGGACCT GTCCTAGGTC TAGACTATAA CAGAGAAGAA	9900
ATTCCACCTG TGAATAGGCA TAATACTGTG GAATATAGAG GATATTTCTT ACAATGATCA	9960
AGATGAGACT TGCAAGAAAG TAGAGTCCAA AGACCATGAG GAAACGCTCG GTTCAACTG	10020
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TACTATAAAA GAGGAGGTAA ATCCCAAGTA AATTAGGGAT ACTCCATAAA AAGAGATAGA	10140
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CGGAAGTGGT CAAAAGAATA GTCCCGATAA AGGAGACTAG TAGAGGAAAG AGGTAGGTTT	10320
GAAGTATTTG GCCAAGTATG CTGAAAAATG GCTGTTCTAA AACAGTCCCG TGGATCCGAG	10380
ATAAGGGATT AAGAAAACCA GATAAGATGA CCAGCATACT GGAAGGATA TAGAGGAGAA	10440
AGAGACGGGG GGTGTCAGCC TGAAAATGTT TTGACTCCTG ACGAATTGTT TTTAAATCAA	10500
TTTTTGATA GTTCATTCTC TTATTATACC ATAGTTCTTA TACATAGTTC GTGACAGTTC	10560
CTACTTTTTT TGATAAAATC ATACAGTGTG TCCTTGGGCA CACTGTATGA ACTGGGACTG	10620

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TCTTTCCAG	CTTCGGAGGT	AAAAAATGTC	AGATTCACCA	ATCAAATATC	GTTTGATTAA	10680
GAAAGAAAA	CACACAGGAG	CTCGTCTGGG	AGAAATCATC	ACTCCCCACG	GTACCTTTCC	10740
GACACCTATG	TTTATGCCAG	TTGGGACACA	AGCCACTCTC	AAAACCTCAGT	CACCTGAAGA	10800
ATTGAAGGAG	ATGGGTTCGG	GAATTATCCT	ATCAAACACC	TATCATCTCT	GGCTTCGCCC	10860
TGGAGATGAA	CTCATTCAC	GCGCTGGTGG	TCTCCACAAG	TTCATGAATT	GGGACCAGCC	10920
TATCTTGACA	GATAGTGGTG	GTTTTTCAGT	TTATTCTTTA	GCAGATAGCC	GTAATATCAC	10980
AGAAGAAGGA	GTAACCTTTA	AAAATCATCT	AAATGGTTCT	AAGATGTTCC	TATCCCCAGA	11040
AAAAGCCATC	TCTATTCAGA	ATAATCTGGG	TTCAGACATC	ATGATGTCCT	TTGATGAATG	11100
TCCTCAGTTT	TATCAACCTT	ATGACTACGT	TAAGAAATCG	ATCGAGCGTA	CCAGCCGTTG	11160
GGCTGAGCGT	GGTTTGAAGG	CTCACCGTCG	TCCACATGAC	CAAGGTTTGT	TTGGAATTGT	11220
GCAAGGTGCA	GGATTGAAG	ACCTTCGCGG	CCAATCAGCT	CATGATCTTG	TCAGCATGGA	11280
TTTCTCAGGC	TACTCTATCG	GTGGTTTGGC	AGTGGGAGAA	ACCCATGAAG	AGATGAATGC	11340
GGTCTTGGAC	TTTACAATC	AACTGCTGCC	TGAAAATAAA	CCTCGTTATC	TGATGGGTGT	11400
GGGAGCGCCA	GATAGCTTGA	TCGATGGGGT	CATTCGTGGG	GTGGATATGT	TTGACTGTGT	11460
CTTACCGACT	CGAATTGCTC	GTAACGGGAC	TTGTATGACC	AGTCAAGGAC	GTTTGGTTGT	11520
GAAAAATGCC	CAGTTTGCTG	AGGACTTTAC	GCCACTGGAT	CCTGAGTGTG	ATTGCTACAC	11580
ATGTAATAAC	TATACACGCG	CTTACCTTCG	TCACCTGCTC	AAGGCTGATG	AAACCTTTGG	11640
TATCCGCTTG	ACTAGCTACC	ACAATCTTTA	CTTCTTGCTT	AACCTGATGA	AGCAAGTGCG	11700
ACAAGCCATC	ATGGATGACA	ATCTCTTGGA	ATTCCGTGAG	TATTTTGTGG	AAAAATATGG	11760
CTATAATAAG	TCAGGACGTA	ATTCTTAAAA	TGGAATTGAT	ATAAAAAAAT	CCTAAGTTTT	11820
CTCTTAGGAT	TTTTCTTCTT	TTTTTGATAG	AATAAAGTGT	ACAATGAAAG	GAAGAATAAA	11880
CTCGTATGCG	CATTAAATGG	TTTCCTCGA	TTAGG			11915

(2) INFORMATION FOR SEQ ID NO: 97:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 9069 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 97:

GAGAGGGCAA	CAGTTCTATC	GCTTCAAATT	TTTTCTTGGT	TTGCAGATAT	TCAAGAATCG	60
GGAGTTTTTC	TATAGTATTC	GGCAGATTTA	TTACAGCCAA	GCATCTCAAA	ANTACGGACA	120

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GCATCCTCCA TCTTTTCTG GCCTTCCTTG ACTCTACCTT GCTTGCTATC AAGGAGACCT	180
TCTGCCCACA GATAACAAT TCGGAAATAG GTCTCATTTT CCTTGTAGAA ATGCTCTTCG	240
ATAACACGTT TAAAATAATA GGCATTGGTA AATTCTTCAC ACTCAATACT AGCTAAAAAG	300
CCATTCAATA GTATAGTATG AAAAAGGTTT CGATTGCCAG ACATTTCCAT TAGAAAATCA	360
GATTTACGTA CCATTCTCG TACATATCTA GTAAAAAGAG AAACAGATAA AAATGGAGAA	420
CTGACTGAAA ATAAATTGAG TTCATAGATT CCCAGATCT CGGTAGAAAA CAAATAATCA	480
TGAAGGACTT TFCCTTCCTC TGCTGTTAAG TCTACCCCTT CATCTATGCT CTTCATATAA	540
GACTTGATAA TAATGGCATT TAGAATATGT TTCTGTTTGT TGTGAGAATG GGCATGCTTT	600
TATACTCCCT GCGATATAAG TCCTCAAGAG GTGCTATATT CTTTGGTTCC AAGACATCTG	660
TAATTTCTTT TCTCAACTCA GAATCTGTAT CATACTGGA ACCTCTTGCC AGAAAGAGGA	720
TCTCCTCCAC ACTGGCAGAT ATATTTTCCA GAGCAAATAG AAACTTTCC ACCGAAAGCT	780
CACTCTGACC TGTTCACAAA CGGACAACA TAGACGGCGA AAATGTCCT CCGGTGCTT	840
GTCTCAGTA GATATTTCTT GACTCTCGTA ATTGTCTAAA GACTTTTCCA ATCTGCTCCA	900
TAGACTTCCC CTTGATTCCG TATTTTCTTC ATTTTATCAT ATTTTTCAGA AAATTCATCA	960
AAAACCTGCC AAATGTCAG AATTATGAGA AATAGAGGA TATTTATCAC GTGGAGGGAC	1020
TGCTATGAGA GACGATATCA AAATCAATGA CCGTGCTTG GCCTGCAAG ACCAAATTAT	1080
CGAAAACTA GAGAAAGTTT TTGATACAGA TGTGGAATTG GATGTTTACA ATCTAGGTCT	1140
GATTTATGAA ATCAATCTGG ATGAAACGGG GCTCTGCAAG ATTGTCATGA CCTTCACCGA	1200
TACTGCCTGT GATTGCGCCG AAAGCCTGCC TATTGAAATC GTGGCAGGTC TGAAACAAAT	1260
CGAGGGTATC AAAGATATCA AGGTGAAGT TACCTGGTCG CCGCTTGA AAATCACACG	1320
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TTTTGAAGTT ATGGATAGAA CTGACGAAGT CAGCTCAAAA CACTGTTTGG AGGTTGTGGA	1500
TAGAACTGAC GAAGTCAGCT CAAAACACTG TTTTGAGGTT GTGGATAGAA CTGACGAAGT	1560
CAGCCCAAAA CACTGTTTGG AGGTTGTGGA TAGAACTGAC GAAGTCAGTA ACCATACCTA	1620
CGGCAAGGCG ACGTTGACGT GATTGAAGA GATTTTCGAG TATGAGTTA TTTTTCCTT	1680
GACTTGTTCA TATCCAGAA GTCTGTCACG GCTCCGCGTG AAGCAGATGA TACGATGTGG	1740
GCATATTTAC CGAGGACACC ACGGCTGTAA AGTGGTGGCA AGGTTGTTTC TGCCTTGCGT	1800
TTTCAAGTT CTTCTTCGGA TACGGCCATA GAAATTTCTT TGGTATCTTG GTCAACCGTA	1860

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ACGATATCGC CGGTACGGAG ATAGGCAATT GGTCCACCAT CCTGAGCTTC AGGAGCGATA	1920
TGTCCAACAA CCAGACCATA AGTACCACCA GAGAAACGTC CGTCCGTCOA GAGGGCCACC	1980
TTATCTCCCT GACCTTTACC AACAAATCATT GAAGAAAGTG ATAGCATCTC AGGCATACCA	2040
GGACCACCTT TAGGTCCAAC AAAACGAACA ACGACTACAT CGCCATCAAC GATTTTCATCT	2100
GTCAGAACGG CCTGAATCGC ATCTTCTTCT GAGTCAAAGA CCTTAGCTGG CCCAACGTGA	2160
CGACGCACTT TAACACCTGA TACCTTGGCA ACTGCACCGT CAGGAGCAAG GTTCCCGTTC	2220
AAGATGATAA GCGGACCATC CGCACGTTTT GGATTTTCAA GTGGCATGAT AACTTTTTGG	2280
CCTGGAGTCA AGTCTGCAA GTCAGCCAAG TTTTCAGCTA CAGTCTTACC AGTACATGTG	2340
ATGCGATCTC CGTGAAGGAA ACCATTTGCC AACAAATACT TCATAACCGC AGGGACACCA	2400
CCGACTTCGT AGAGGTCTTG GAAGACATAC TGACCAGATG GTTTCAGTC GGCCAAGTGA	2460
GGCACACGTT CTTGAATCGT ATTGAAGTCC TCAAGTGACA AGTCAACAT TCGCGCATGG	2520
GCAATGGCGA GCAAGTGAAG AGTGGCGTTT GTAGAACCAC CGAGAGCCAT CGTTACAGTG	2580
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ATCTTAACAA CAGCACGTCC TGCTGCTTCG ATATCTTCTT TCTTATCAGC TGATTACGCT	2700
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ATAGCTGGGA TATCCATATT AGCAATAGCA ATCATAGATC CAGGCATGTT CTGTGTCACAG	3000
CCACCGATAG CGACGAAGGC ATCCACGTTG TGACCACTCA TAGCCGCTTC GATGGAGTCC	3060
GCGATGATGT CACGAGATGT TAGAGAGAAA CGCATACCAG GCGTTCCCAT AGCGATCCCG	3120
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GAAATCACTC CCACAATCGA TGTTCAAAG TCCTTATCTG TCATACCAGT CGACGAAGC	3300
ATAGCACGGT TAGGTGATTT AACCATGCTG TCATAAATGC TACTGCGGTG ACGTTTATCT	3360
AATTCAGTCA TCTTATCCCT CCCATTTCAG TTTTACTAT TATAGCACA TTTTCGCATG	3420
AAGAACAGAA TAAATTTCTT GAATTTTCAG AAAATTCTAT ACACATGTGA AATATTTAA	3480
ATTAAAAACA ACAAAGCGGA TTAGTGCACT TTCTGATGAC CAGAAATATGC TTTTAAATCC	3540
GCTTCTTTA AATAACGTAC TGTAATTTT ACAGAAATTC TTTCAAATAA GTGTATTTAA	3600
CATCTATCTT GCATTATAAA TTTCTAGAAC CTTCTCTTTT ATATTCGATT CACTCAAACC	3660

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ATACTCATT	AGAAGATAAT	CCATTTTCCC	TACTTGACCG	AATCTTCTT	GAACACCCAT	3720
CCGATGAAT	TTTGTATTTC	CATCATCAGA	GAATAATTCA	CATAAAGCAC	TGCCAATTCC	3780
ACCTATCTGA	TTGTGGTTTT	CTACAGTAAA	TATAGTTTTT	CCACTTAACA	TTGTTTTTAT	3840
CTGTTCTGGT	ATCGGTTTGA	TTCTAAATAA	ATCTATCACA	CCTACTGAAT	AACCTAATTT	3900
AGACAGTTCA	TCTGCAACTC	GAATACTTGG	AGCAACCATT	ATGCCAGAAG	CAACGATTAC	3960
AAGATCTTCA	CCATGCCTTA	ACTCAATGTA	GCCTTTAGAA	AAATCTTCTC	CACCTTGATA	4020
CACAGGAAC	GGAGCTTTTC	TAATTGTTTC	AATATATTTT	AGTCCTTTTA	AGTCTAATGT	4080
CTGGTTCAAT	ATTTCACGAA	ATTGGATATC	ATCAGTTGCT	TCGAAAATGA	TTGATTTAGG	4140
AATTAAACGT	AACAATCCAA	TTTCTTCAAA	TGGCATATGT	GTTCCACCAT	TCATCTCTGC	4200
CGTTACTCCT	GCATCTGATC	CAATCACAGT	GGCATCCAAT	TGTGCGTATC	CAAGAGAAAT	4260
AAATAATTGA	TCAAATACTC	TTCGTGAAGC	AAAAGGACCA	AATGTATGAA	GATAAGGTCT	4320
AAACCCCTGA	ATAGACAAGC	CTGCTGCAAG	GCCGACCATT	TCTGCTTCCA	TAATCCCAAC	4380
ATTACACATA	CGGTCTCCAA	AGTCCTTTTC	AAGATTATTA	GTAGCCATCG	AACCTGACAA	4440
ATCGGCTTCT	AAGACTACTA	TATCAGAATC	ACTTTGATTA	GCCTCTAAAA	GGAAGTCTCT	4500
ATATACATGC	CGTAATTCTT	TCGTACTTCT	CATCATTCGT	TTTCCTCCAA	TTCTGACTTT	4560
AATCTTTCTA	CAACTGAAGT	TAACATTGTG	TTCTCCTCTA	CAGTAGGGCG	AAGATGATGA	4620
TTGGATTTC	TTTCTTCCAG	CTCTTGAACC	CCTTGACCTT	TAATAGTATC	TAATACAATG	4680
CACTTAGGTG	ATGAATTATT	TGACTGTTTT	AATTGGACAA	TCCCTTCATA	AATTTCTCTA	4740
ATATCTGAAC	CCTTGACCCT	AATGGATTCA	AATCCAAATG	CTGAAAATTT	TTCTACGAAA	4800
TCACCTGGAT	TACAAATATC	CTTTGTAAAA	CCATCTAATT	GTTTTTTGTT	ATCATCAACA	4860
AATACAATTA	AGTTGGATAA	CTGTTGATGA	GAAGCAAAC	GTATAGCCTC	CCAACATTGT	4920
CCCTCATTTA	ACTCACCATC	TCCAACAATA	GCGTAAGTAT	AAAAGGGACT	CTTCTTTATT	4980
CTCTGACCAT	ATGCAAGTCC	AGTTGCAACA	CTAATTCCTT	GTCCTAAAGA	GCCCGTTGTC	5040
ATATCTATGC	CTGGCGTTAG	ATTTCTATCA	GGATGAGACG	GTAATTTGGT	TCCATTTGTA	5100
TTTAAAGAAT	ATAAGAATTC	TTTGTCAAAG	AAACCATTCA	AATAGAGTGT	ACTGTATAGA	5160
GCTGGTCCCT	CGTGACCTTT	TGATAATATG	AAATAATCTC	TATCTCGTGC	TGCAAAATAT	5220
TCTGGAGTCA	TTGGCATTAT	TTCACCATAA	AGCACCGCTA	AACTTCTAC	GATAGACAGA	5280
CTTCCTCCGT	AATGTCCGAA	TCCAAGATGA	TTCAATGTTC	TAAGAGTATT	TAATCGGATG	5340
TTAGTCGCAA	ATTTTCTTAA	CCCATCTTCT	CTATTTTAC	TTAAAATCAT	CCCTTATTC	5400

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TCCGTTGCAG ATGGCTTTTT AATAAAGGAT ACTCCAAACA TAACTGCTAG AATAAGAACA	5460
AGACCAATCA CAATGCCTGC TTGTGAGCCA AATTGATTTA ACATTCTTAA AATAATTCCCT	5520
GATAGACCAA AATCTGCATC TGAGAAAGTT GATCCTTGGA AACCAAGTCC TCCCAAAACT	5580
GGCATTAAAA AGACTGGAAG AAAACTGATT AAAATACCTT GTAAAAATGC TCCAATAGTG	5640
GCTCCACGAA CACCACCAGA TGCATTCCCA ATGACACCTG CAGTCGCTCC ACAGAAGAAA	5700
TGAGGCACAA CACCTGGTAA GATAACAACC GTTCCTGAAG CAATCATAAT TACCATACTT	5760
ACTAAACCAC CAACAAAAC ^T AGAGATAAAT CCAATTAGAA CTGCATTGGG TGCATAAGTA	5820
TAAACAATCG GACAATCCAA AGCAGGTTTT GAATTAGGTA CAAGACGCTC TGAATACCT	5880
TTAAAGGCTG GAACAATTC GCCCAAAATA AGGCGAACAC CTGCTAAAAT AACAAATACC	5940
CCTGCTGCAA ATTGACCTGC TAATTGTAAA GCATAAACTA GACCACTTGT ACCACTACTG	6000
ATTTCTTTTT CTATATATTC TGACCCTGCA AAGATAGCTA CAATAATGTA AATAACTGCC	6060
ATGGATAAAG TAATACTAAC AGTACTATCA CGTAAAAAAG CTAAACTCTT TGGAAATTTA	6120
ATGTCTCTG TTGATTTTGA TTTGTCACCG ATAAGGCTAC CAGTAAAACC ACTCAACCAA	6180
TATCCCAAAG AACTGAAATG ACCTAAAGCT ACCTTGTCAT TTCCAGTTAA TTGAACCATA	6240
TATTTTGTGA CAAATGCTGG GGAATACTC ATAATAATAC CGAGTGCTAA TCCTCCTAGT	6300
AAGATGAGAG GCAAGCTAGT AAAGCCAGCA ACTGATAAAA TGACCGCAAT CATACATGCC	6360
ATATATAGAG TGTGGTGCCC TGTAAAAAA ATATATTTAA ATCGAGTAAA ACGAGCGATT	6420
AAGATATTGA ACACCATGCC TGCAACATA ATCATTCGAG TAGCTGAGCC ATATGTTGTT	6480
AAAGCTACAG CTACAATTGC TTCATTATTC GGCACAACGC CAGATAAATG AAAAGCATGC	6540
TCAAACATGG TACCAAATGG ATTTAAAGAA TTTTGTACAA TTCCTGCACC ACCAGATACA	6600
ACTAAGAAAC CAACAAAGGT CTTAATTCCA CCTTTAATAA TATCAGGTAA TTTCTTCTTC	6660
TGAAGAACTA ATCCTAAGAT TGCAATTAAA GCTACTAAAA TAGCTGGTGT ACTACAATA	6720
TCCAATATGA ACTTCATCAT GACGCTAGCC TCCTATATAA GTCCTTTTTC TTCACAAAGT	6780
TTAGTAATTA ATTCTCGTAG TTCATCCATA TCAATAATAC TATTTAAGAT ACGAACATCT	6840
CCAAGATGAC TAGCTGAATC AGCTAGATCA CGACCAACAA TCCAAATATC AGCTGCATTT	6900
GGATCTGCTC CACCTAAATC ATAATGTTCA ACTTCTACAT CCGAAACATT CAAATCACTC	6960
AATACAGATT CAATATTCAT CTGTACCATA AAACCTGAAC CTAATCCTGA ACCACAAGCT	7020
GTACCAATTT TTAACATTAT CTAATCCTCC TGTTTAATTA TCATTTTAAT GTCATCATAG	7080
TTTTTTGATG ATATTAAAGT TTGAACATGA TTTTATCTC TTAAAATTGT TGTAAATGT	7140
GACAAAGCCT TTAAATGACT CTCATTATCA ATGGCTGCAA TACAAATCAA CAATCTTACC	7200

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TCTTGTTC TG	GATTATCCAA	TAAATAAATC	GGTTCCTCCA	AAACTAACAT	TGACATTCCCT	7260
ATTTTCATTCA	CACCTTCATC	TGGCCGAGCG	TGAGGAATTG	CTACTCCCTT	CCCTAAATTA	7320
ATAAAAGGTC	CAAACTCTTC	TACTTTTGA	ATCATTGCCT	CAGGGTAGTT	CTCAGTTATC	7380
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TGCGAACTAA	CCTGATAGGT	TTCTTTGGTA	ATAAGTTGTT	CTAGCACTGG	TACAATTTCC	7500
TTTCTATCAT	TTTTTTGGTA	AAGATAATTC	TTTAACGCCA	ATCTTAATTC	CAATTCCTGT	7560
GTAATAATTC	CATATCTTTT	GACAATATTC	AGGATTTGTT	CAATCTCAAA	ATCTCCATAC	7620
TCTAAATTCG	GAAAACTTTT	TAACACTAGT	TCTACTAGTT	GTATTGCTTG	CTCTTCAGTC	7680
ATCATAACCG	AAACTAGATA	ATTTGGCTTT	TCTGTCTCCA	CCTTTATGGT	AGAAAAAACC	7740
ATATCATAGT	CACTACTAGC	TTTCACCTGT	AAATCATCAA	TCTTTGAGGT	TCCTATAAAC	7800
TCAATTTGAG	GAAATAATGC	TAATAGATTC	TCTTTTAACA	TCAATGAAGA	ACTAACACCA	7860
TTAGGACAAA	TGATTGCTGC	TTTATACCAT	TTTTGAGGCA	AAGTATCTGC	TTTCTTTAAA	7920
TAACCTCCGA	AATGGATAAC	AAAATATGCT	GTTFCTACTAT	CAGGTATGGG	ATTGTCAATA	7980
GCGTCCATCA	AGGGCATCAA	AGAATCTTTG	ACTAATTCAA	ATAAATCAGG	ATAATGTTCT	8040
TTAACATGCA	ATACATATTC	ATTTGAACTA	GGTAGGCCGA	ACTTTAATCT	ATAGTAAGCC	8100
GGTATAAGGT	GGCGGCGAAG	ATTTTCTCTC	AATCCTTCCC	TTTGTTTAAA	ATGTAACAAA	8160
GAAATATCTT	CCATCTCTACT	TATAATAGCC	TCTGTTAATT	GATTAAAGTA	AACCGGAGCA	8220
ACATCTACTT	CACCTTCAAA	GCAACTTGAT	AATAAAACGG	TGATATAGCG	ATAATCATCC	8280
TCAGAAAACA	CCGTATCTAT	AATTCCCAAA	TCAACCACTG	TATCCAATAA	AATAGTGGTT	8340
ATATCTTGAA	TAACAGGAGA	TACTAATGTC	TCTGAAAGAC	ATACTCTTTC	AACATCCCTT	8400
TGATACCTAC	ACAGAATGAA	TACTAAACCG	AAAAGGTAAA	CTTTTAATTG	ATTAACAATA	8460
GGTACTAGCT	GTAGCTTCTC	ATAATAATCT	TTAACTACCT	GATCAATCAA	ATCATAAGTT	8520
AATGAATACC	CCCAACTGGA	TAAAACATAA	TCCAAACCCC	AAATCCCTAT	GGAGGATTCC	8580
AGCAACTCAC	TAACCATTTG	AAAAGCTAAG	CGGTGCTTAT	TCCACTCTGA	ACCGTGATAA	8640
GTATAACCTT	TIGCTCTACT	GTACCCTAGC	TCCAAATCAT	TATCTAACAT	AATCTTICTT	8700
AATGATTGAA	TATCAGATAA	GGTTGTATTC	TTACTTACTT	TCAAAAAGTC	TTGGTAATGA	8760
CTATTCGATA	TAAAATCTAA	TCGGCAAAAA	GTGTAAAGAT	AGATTAAAGC	TAAGCGAGTC	8820
GACTTTGGTA	AAACCAATTC	ATCCGACTTA	ATAATATCTG	TCAAAGACTG	CTTCGTACGA	8880
TTTGATAAAC	TATAGCGACC	TTGCTTTTTA	TCCAGCACTA	TCCCTTTATT	AGCTAGATAA	8940

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GGCACTAAAT AATCTATTCC TTCTTTGACT TCCTTTATAG GTAAGCTCAC CTTAACAGAT	9000
AATTCATATA ACGATAGCTC ACAATGATCC ATCAAAGTCA TCAAAATAAC TAGTGCTCTA	9060
TAATCAAAC	9069

(2) INFORMATION FOR SEQ ID NO: 98:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 8654 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 98:

CGAGACAACA AGATGAAGAA AAATTTGCCC TATCGTTTGT GCGCTTGCA AGTGTAGCAC	60
TTCTTGCAGC CTGTGGAGAA GTGAAGTCTG GAGCAGTCAA CACTGCTGGT AACTCAGTAG	120
AGGAAAAGAC AATTAAAATC GGGTTTAACT TTGAAGAATC AGGTTCTTTA GCTGCATACG	180
GAACAGCTGA AAAAAAGGT GCCCAATTGG CTGTTGATGA AATCAATGCC GCAGTGGTAT	240
CGATGGAAAA CAAATCGAAG TAGTCGATAA AGATAATAAG TCTGAAACAG CTGAGGCTGC	300
TTTCAGTTACA ACTAACCTTG TAACCCAATC TAAAGTATCA GCAGTCGTAG GACCTGCGAC	360
ATCTGGTGCG ACTGCAGCTG CGGTAGCGAA CGCTACAAAA GCAGGTGTTT CATTGATCTC	420
ACCAAGTGCG ACTCAAGATG GATTGACTAA AGGTCAAGAT TACCTCTTTA TTGGAACTTT	480
CCAAGATAGC TTCCAAGGAA AAATTATCTC AACTATGTT TCTGAAAAAT TAAATGCTAA	540
GAAAGTTGTT CTTTACACTG ACAATGCCAG TGAATATGCT AAAGGGATTG CAAAATCTTT	600
CCGCGAGTCA TACAAGGGTG AAATCGTTGC AGATGAAACT TTCGTAGCAG GTGACACAGA	660
CTTCCAAGCA GCCCTTACAA AAATGAAAGG GAAAGACTTT GATGCTATCG TTGTTCTTGG	720
TTACTATAAT GAGGCTGGTA AAATTGTAAA CCAAGCGCGT GGCATGGGAA TTGACAAACC	780
AATCGTTGGT GGTGATGGAT TCAACGGTGA GGAGTTTCTA CAACAAGCAA CTGCTGAAAA	840
AGCATCAAAC ATCTACTTTA TCTCAGGCTT CTCACTACT GTAGAAGTTT CAGCTAAAGC	900
TAAAGCCTTC CTTGACGCTT ACCGTGCTAA GTACAATGAA GAGCCTTCAA CATTGTCAGC	960
CTTGGCTTAT GATTTCAGTT ACCTTGTAGC AAACGCAGCA AAAGGTGCTA AAAATTCAGG	1020
TGAAATCAAG AATAACCTTG CTAAAACAAA AGATTTTGAA GGTGTAAGTGT GTCAAACAAG	1080
CTTCGATGCA GACCACAACA CAGTCAAAAC TGCTTACATG ATGACCATGA ACAATGGTAA	1140
AGTTGAAGCA GCAGAAGTTG TAAAACCATA ATAGAAAAAT GTTGAAATAG GGAATGAGCC	1200
TTTGACTCAC TCCCTGTTTC GATATTTAAT ACTCTTCGAA AATCTCTTCA AACTGCGTCA	1260

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ACGTCGCCTT GGATTATATA TGTGACTGAC TTCGTCAGTC TTATCTACAA CCTCAAAGCA	1320
GTGCTTTGAG CAACCTGCGG CTAGTTTCCT AGTTTGCTCT TTGATTTTCA TTGAGTATAA	1380
GAACCTATCA AAAAGTGAGG GAAAACCCTC GGAATTATAA ATAGAAAGAG TGAATCTTAT	1440
GCTCCAACAA CTCGTAAATG GTTTGATTCT AGGTAGTGT TACGCGCTGT TAGCCCTAGG	1500
ATATACCATG GTTTACGGAA TTATCAAGCT CATCAACTTC GCCCATGGTG ATATTTATAT	1560
GATGGGAGCC TTTATCGGTT ATTTCTTGAT CAATCTTTC CAAATGAATT TCTTTGTAGC	1620
GCTTATTTGTA GCTATGCTAG CGACAGCTAT TCTTGGTGTC GTGATTGAGT TTCTTGCTTA	1680
CCGACCTTTG CGCCACTCTA CTCGTATTGC TGTTTTGATT ACGGCTATTG GGGTTTCTTT	1740
CCTATTGGAG TATGGAATGG TCTATCTGGT TGGTGCCAAT ACCCGTGCCT TCCCTCAAGC	1800
GATTCAAACA GTTCGATATG ATTTGGGACC AATTAGCTTA ACAAATGTGC AGTTAATGAT	1860
TTTGGCCATT TCCTTGATT TGTATGTTTT GTTACAAGTC ATTGTCCAAA AGACTAAGAT	1920
GGGGAAGCC ATGCGTGCG TATCAGTAGA TAGCGACGCG GCGCAATTGA TGGGGATCAA	1980
TGTAAACCGT ACGATTAGCT TTACCTTCGC TTTGGGTCT GCTCTTGC GG GTGCGGCTGG	2040
TGTTCTGATT GCTCTTTATT ATAACCTCT TTAGCCTTTG ATGGGGGTTA CTCCAGGTCT	2100
TAAATCTTTC GTTGCCGCG TACTTGCTGG TATCGGAATT ATTCCTGGTG CGGCTCTTGG	2160
TGGCTTTGTG ATTTGGTCTAT TGGAAACCTT TGCGACTGCC TTTGGGATGT CAGATTTCCG	2220
TGATGCCATT GTTTATGGAA TCTTGTGTGT GATCTTGATT GTCCGCCAG CTGGTATCCT	2280
TGCTAAGAAT GTGAAAGAGA AGGTGTAAAC GATGAAGGAA AATTAAAG TTAATATTCT	2340
ATGGTTACTC CTTTGTGTAG CTGGCTATAG CTTGATTAGT GTACTGGTTT CAGTCGGAGT	2400
ACTTAATCTA TTCTATGTAC AGATTTTACA ACAAATTGGA ATTAATATTA TTTTGGCTGT	2460
TGGTCTCAAC TTAATCGTTG GTTTTTCAGG ACAATTTTCA CTGGTCATG CTGGTTTCAT	2520
GGCGATTGGT GCCTATGCAG CAGCTATTAT TGGTTCTAAA TCACCAACCT ACGGTGCCTT	2580
CTTTGGAGCT ATGCTTGTAG GGGCTTTGCT TTCAGGAGCA GTTGCCCTTAC TTGTCGGCAT	2640
TCCAACCTTG CGCTTGAAGG GGGACTATCT TGCGGTAGCA ACTCTGGGTG TTTCTGAAAT	2700
TATCCGTATC TTTATCATCA ATGGTGGAAG CCTACAAAT GTGCGGCAG GTATCTTAGG	2760
GATTCCTAAC TTTACAACCT GGCAATGGT TTAATCTTT GTCGTGATTA CAACCATTGC	2820
AACCTTGAAC TTCTTGCGTA GCCCAATTGG TCGTTCAACC CTCTCTGTTT GTGAAGATGA	2880
AATCGCTGCT GAGTCAGTTG GGGTTAATAC GACTAAAAT AAAATCATCG CTTTGTCTT	2940
TGGTGCCATT ACTGCAAGTA TTGCTGGGTC ACTTCAGGCA GGATTTATCG GGTCTGTTGT	3000

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ACCGAAAGAT TACACCTTCA TCAACTCAAT CAACGTTTGG ATTATTGTTG TATTTGGTGG	3060
ACTCGGTTC ATTACAGGTG CGATTGTTTC GGCTATTGTT CTGGGAATTT TGAATATGCT	3120
TCTCCAAGAT GTTGCTAGTG TGCCTATGAT TATTTACGCT TTGGCCTTGG TATTTGGTAAT	3180
GATTTTCAGA CCAGGTGGAC TCCTTGGAAC ATGGGAACTG AGCCTATCAC GTTCTTTTAA	3240
AAAATCTAAG AAGGAGGAAC AAACTAATG GCATTACTTG AAGTAAACA GTTAACCAA	3300
CATTTTGGTG GTCTAACAGC TGTGGAGAT GTGACTCTTG AATTGAACGA AGGGGAACTG	3360
GTTGGATTAA TCGGTCCAAA CGGAGCTGGG AAAACCACCC TTTTCAACCT TTTGACCGGT	3420
GTTTATGAAC CAAGCGAGGG AACAGTAACC CTAGATGGTC ACCTTTTGAA TGGGAAATCA	3480
CCTTATAAGA TTGCTCTTT GGGACTTGA CGTACTTCC AAAATATCCG TCTCTTTAAA	3540
GATTTAACAG TTTTAGATAA TGTTTTGATT GCTTTTGAA ACCATCACA ACAGCATGTT	3600
TTTACTAGTT TCTTACGCTT ACCAGCTTTT TACAAGAGTG AAAAGAATT AAAGGCTAAA	3660
GCTTTGGAAT TGTGAAAAT CTTTGATTTA GATGGTGATG CAGAGACTCT TGCTAAAAAT	3720
CTTTCCTACG GACAACAACG TCGTTTGAA ATGTTCGTG CCCTTGCTAC GGAACCTAAA	3780
ATTCTCTTCT TAGATGAACC AGCAGCAGGT ATGAACCCAC AGGAAACAGC CGAATTGACT	3840
GAGTTAATTC GTCGTATCAA AGATGAGTTT AAGATTACAA TCATGTTGAT TGAACACGAT	3900
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GCTCAAGGAA CTCCAGACGA AATTAAGACC AATAAACGCG TTATCGAAGC TTATCTAGGA	4020
GGTGAAGCCT AATGTCTATG TTAAAAGTTG AAAATCTTTC TGTGCATTAC GGTATGATCC	4080
AAGCAGTTCG TGATGTAAGC TTTGAAGTTA ATGAAGGAGA AGTTGTTTCC CTTATCGGTG	4140
CCAACGGTGC AGGTAAGACA ACTATTCTTC GCACCTTGTC AGGTTTGTTT CGACCAAGTT	4200
CAGGAAAGAT TGAATTTTGA GGTCAAGAAA TCCAAAAAAT GCCAGCTCAG AAAATCGTGG	4260
CAAGTGGTCT TTCACAAGTT CCAGAAGGAC GCCACGTCCT TCCTGGCTTG ACTGTTATGG	4320
AAAATCTTGA AATGGGAGCT TTCTTAAAGA AAAATCGTGA AGAAAATCAA GCTAACTTGA	4380
AGAAGGTTTT CTCACGCTTT CCTCGTCTTG AAGAACGGAA GAACCAAGAT GCAGCCACTC	4440
TTTCAGGGGG GGAACAACAA ATGCTTGCCA TGGGACGCGC CCTCATGTCA ACACCAAAAC	4500
TTCTTCTTTT AGATGAACCA TCAATGGGAC TTGCCCAAT CTTTATCCAA GAAATTTTGG	4560
ATATCATTC AATATTCAG AAGCAAGGAA CAACGGTCCT CTTGATTGAA CAAAATGCCA	4620
ATAAAGCACT TGCAATCTCT GACCGAGGAT ATGTACTGGA AACAGGGAGA ATCGTCCTAT	4680
CAGGAACAGG AAAAGAACTC GCTTCATCAG AAGAAGTCAG AAAAGCATAT CTAGGTGGCT	4740
AAAACAATCC AGTGGATTGT TTTAGTCGCG AGATGGAGAT TACGAAGTAA TCATCAATAT	4800

749

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AAAGCTTAAT	TTCTAATAAT	TGAAAAATC	GAATCAAAAA	TTTCTTACCT	TCATTACACAG	4920
AGCTCGATTT	CAGAGCTCTT	TTTGCTAGCT	TATTCATACT	TTTCTGAATT	TCGAAAAAGA	4980
AATGTAAGCG	TTTGATAGAT	TTACAAAAAG	ATTGTATAAT	AGGGATAAGA	ATAGAAAAGG	5040
AGAAGTCTCA	TGGCAGTTAA	AGATTTTATG	ACCCGCAAGG	TAGTTTATAT	TAGTCCAGAT	5100
ATAACAGTAT	CTCATGCAGC	AGATTTGATG	AGAGAGCAAG	GTTTGCACCG	TCTGCCTGTT	5160
ATCGAAAATG	ATCAATTAGT	TGGTTTGGTG	ACTGAGGGAA	CCATTGCACA	AGCAAGTCCA	5220
TCTAAAGCAA	CAAGTCTTTC	TATCTATGAG	ATGAATTATC	TTCTGAATAA	GACAAAAGTA	5280
AAAGATGTCA	TGATTCGCGA	TGTTGTCACT	GTCTCAGGCT	ATGCTAGTCT	AGAAGATGCA	5340
ACTTATCTGA	TGTTGAAAA	TAAGATTAGT	ATTCTCCCTG	TCGTAGATAA	CCATCAAGTA	5400
TACGGAGTTA	TTACTGACCG	TGACGTTTTC	CAAGCCTTTC	TTGAAATTGC	AGGTTATGGC	5460
GAAGAAGGGA	TTCGTGTACG	CTTTGTTACA	GAAGATGAAG	TTGGTGTCT	TGGAAAAATT	5520
GTTTCTTTGA	TTGTAGAAGA	AAATTGAAT	ATCTCCCAT	CAGTCAATAT	TCCGCGTAAG	5580
GATGGTAAGG	TGATTATCGA	AGTGCAAATC	GATGGATCAA	TTGATTTACC	AGCCTTGAAA	5640
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CCTGATTTTT	GGAACGATAA	TATTGCGGCC	CAAAAAACGT	CGCAAGAATT	AAATGAATTA	6000
AAAAACACTT	ACAAATACCTT	CCATAAGATG	GAAGAGTTGC	AGGATGAAGT	CGAAATTTTA	6060
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AACAATGCCA	TCTTGGAAT	CCATCCAGGT	TCTGGTGGTA	CTGAGGCGCA	GGAAGTGGGT	6240
GATATGTTGC	TTCGTATGTA	TACTCGTTAT	GGTAATGCTA	AAGGCTTTAA	AGTGGAAGTG	6300
TTGGATTACC	AAGCAGGTGA	TGAGGCTGGT	ATTAAAGTCG	TAACTTTATC	ATTGGAAGGG	6360
CCTAATGCCT	ATGGTCTCCT	CAAGTCAGAA	ATGGGTGTTT	ACCGCTTAGT	GCGAATCTCA	6420
CCATTTGACT	CTGCCAAACG	TCGCCATACC	TCTTTCACAT	CTGTAGAAGT	GATGCCAGAA	6480
TTGGATGATA	CTATTGAAGT	GGAAATCCGT	GAAGATGATA	TCAAGATGGA	TACCTTCCGT	6540

750

TCAGGTGGTG CCGGTGGACA AAACGTCAAT AAGGTTTCAA CAGGTGTACG TTTAACCCAC	6600
ATTCCAACTG GAATTGTTGT CCAATCAACA GTAGATCGTA CCCAGTATGG AAATAGAGAT	6660
CGTGCCATGA AGATGTTGCA GGCTAAGCTC TATCAAATGG AGCAAGATAA GAAGGCTGCG	6720
GAGGTAGATT CTCTCAAAGG TGAGAAAAAG GAGATCACCT GGGGAAGCCA AATCCGTTCT	6780
TATGTCTTCA CGCCTTATAC TATGGTAAAA GATCACCGAA CTAGCTTTGA GGTGCTCAG	6840
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ATTAGCTAAG ATAGAAAGGA ACTCACATGT CAATTATTGA AATGAGAGAT GTCGTTAAAA	6960
AATACGACAA CGGAACAACCT GCTCTACGCG GTGTTTCGGT TAGCGTTCAA CCGGGGGAAT	7020
TTGCTTACAT CGTAGGACCT TCAGGAGCAG GGAAGTCAAC TTTTATTCGT TCTCTGTATC	7080
GTGAAGTAAA AATCGATAAA GGAAGCCTAT CAGTTGCTGG TTTAATCTG GTTAAGATCA	7140
AAAAGAAAGA TGTCCTCGTT CTACGTCGTA GTGTTGGGGT TGTCTTCCAG GATTATAAAT	7200
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CGGATAATTC ATGGGAAATT ATGAATCTCT TGGAACGGAT TAACYTACAA GGAACAACATA	7500
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GTAGCTGCTG TCAGTTCAGT CATGATTACT TTGACCTTGG TGGCAATATT TGCATCTGTT	7740
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AAAATCTTTG AAGGAGATGC CAATCCTCTC TATGATGCCT ATATTGTAGA GGCAAACACT	8040
CCAAATGATG TAAAACTAT AGCCGAAGAT GCTAAAAAA TTGAAGGTGT CTCTGAGGTT	8100
CAAGATGGCG GTGCCAATAC AGAAAGACTC TTCAAGTTAG CTTCATTTAT CCGTGTTTGG	8160
GGACTAGGGA TTGCTGCTTT GTTAATTTTT ATCGCAGTTT TCTTGATTTT AAATACCATT	8220
CGTATTACCA TTATTTCCCG CAGTCGCGAA ATTCAAATCA TGCCTTTGGT CGGAGCTAAA	8280
AACAGTTATA TCCGTGGACC GTTCTTGTTA GAAGGAGCCT TTATCGGTTT ATTGGGAGCT	8340

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ATCGCACCAT CTGTTTGGT CTTTATTGTT TATCAAATTG TTTACCAATC TGTCAACAAA	8400
TCGTTGGTAG GGCAAAATCT ATCCATGATT AGTCCAGATT TATTTAGTCC GTTGATGATT	8460
GCCCTACTAT TTGTGATTGG GGTTTTCATT GGTTCATTGG GATCAGGAAT ATCCATGCGC	8520
CGATTCTTGA AGATTTAGGT AAAATAGCTG CTTTATGAG GAGATTGTAA AATCTCCTTT	8580
TTTGCTACAA GAGTTTTTGA AAAGAGATGC GCAGAAGAAA AGAGCTTCCA AAGAAGTCCC	8640
CCAGAGAAGA CTTC	8654

(2) INFORMATION FOR SEQ ID NO: 99:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 19718 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 99:

TGTCGCGTCA AAATCATTAC TATGGCTATG TATAGCCCTT ACTATGACTT GGCTAAACAC	60
GTTCGCTTTC AAATTTCTAG GCTCAGGCTG AAACAGTCTC CCAGGCTGTT CACTCCCGAA	120
TGCTAAAATC GTTCTTGATC GCTTTCACAT TGTACAACAT CTTAGCCGTG CTATGAGTCG	180
TGTGCATGTC CAAATCATGA ATCAGTTTCA TCGAAAATCC CATGAATACA AGGCTATCAA	240
GCGCTACTGG AAACATCATT AACAGGATAG CCGTAAACTG AGTGATAAGC GATTTTATCG	300
CCCTACTTTT CGCATGCACT TAACAAATAA AGAAATTCTT GACAAGATTT TAAGCTATTC	360
AGAAGACTTG AACACCACT ATCAGATCTA TCAACTCTTA CTTTTTCACT TTCAGAACAA	420
AGACCCTGAG AAATTTTTCG GACTCATTGA GGACAATCTG AAGCAGGTTT ATCCTCTTTT	480
TCGACTGTC TTTAAAACCT TTCTCAAAGA TAAAGAAAAG ATTATCAACG CCCTTCAACT	540
ACACTATTCT AATGCCAAAC TGAAGCGAC CAATAATCTC ATCAAACCTA TCAAGCGCAA	600
TGCCCTTGGT TTTGGAAGT TTGAAAACCT CAAAAAATCG ATTTTATATCG CTTTGAACAT	660
CAAAAAGAA AGGACGAAAT TTGTCCTTTC TCGAGCTTAG CTGACTTCAA CCCACTACAG	720
TTGACAAAGA GCCTAATTTC CATAAAAATT GACATGGAAA TTATAAAACC ATTACTAGTT	780
TAGTCCTTTT TGATAACGTG CCAATTCGGC TTGGTTCGCC CAAACATAGT GACCTGGACG	840
GATTTCTACC ATAGATGGCT TATCAGTCTC ATAGTCGTGT TGACTTGGAT CGTAAACCTT	900
CAAGACCTTC TTACGTCCA AGATTGGATC TGGGATTGGT ACCGCTGAAA GCAAGGCTTG	960
AGTATATGGG TGAATTGGAT TGTAAACAA TTCTTCTGTT TCTGCAACCT CTACAATAAC	1020

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ACCCTTGTA	ATAACTGCCA	TACGATCTGA	AATAAAGCGA	ACAACCGACA	AGTCATGGGC	1080
GATGAAGAGA	TAGGTCAGGC	CGAGCTCTTT	TTGGAATTTT	TTGAGCAAGT	TCAAGACTTG	1140
GGCACGTACA	GAAACGTCCA	AGGCTGAAAT	TGGCTCATCT	GCAATAACAA	AGTCTGGTTG	1200
CATGACCAAG	GCACGGGCAA	TACCGATACG	TTGACGTTGA	CCGCCTGAGA	ATTCATGAGG	1260
GTAACGAGTC	AAGTGCTCAG	CAAGAAGACC	TACTTCACGG	ATAATATTTT	GAACTTTCTC	1320
TTTACGTTCT	TCTTCATCCT	TAAATAAACG	GTGATTGTAA	AGACCTTCAG	AAATAATATA	1380
ATCAACAGTC	GCACGTTTAT	TCAAACCTGC	GGCAGGGTCT	TGGAAAATCA	TCTGGATTCTG	1440
ACGAATCAAT	TCCGCAGCTT	GTTACGCGA	TTTCTTACCA	TTAATCTTTT	GACCATCAAA	1500
AATGATATCT	CCATTACTTG	TATCATTTAG	ACCGATGATA	GCACGACCAA	TAGTTGTTTT	1560
CCCCTACCG	GACTCACCTA	CAAGCGAGAA	AGTTTCTCCC	TTGTTGATAA	AGAAGTTAGC	1620
ATTTTAAACC	GCGACAAACT	TCTTACTTCC	TTACCCGAAG	GAAATTTCTA	AATCTTTGAT	1680
TTCTACTAAT	TTTTCAGACA	TTTCCTTCCT	CCTAGTCAGC	CAGATGGGCA	AATCCCATTT	1740
TTTCACGGAT	CTTATCATGG	AGATTTGCAA	TCACAGCTGG	TTTTTCTACT	TTCGGAGCAT	1800
CCTCATGAAG	AAGCCAAGTT	TTAGCCCAAT	GTGTCTCTGA	TACTGAGAAT	TGAGGAGCTT	1860
TTTGTTGCAA	GTCAATCTGC	ATTGCGTAGT	CAGAACGCAA	GGCAAAAGCA	TCCCCTTTCA	1920
GGTCACTATA	AAGTGACGGA	GGTGTTCCTG	GGATTGAGTA	AAGATCCCCT	TTATCATCAG	1980
CAAGCTGAGG	CAAGCTAGAC	AAGAGACTCC	ATGTATATGG	ATGGCGAGGG	TCATAGAAGA	2040
CTTCCTCAAC	CGTTCCATAC	TCAACGATTT	CTCCTGCATA	CATAACCGCT	ACCTTATCCG	2100
CAATACTTGC	CACCACACCA	AGGTCGTGGG	TAATAAAGAT	TGTTGTGAAA	TGATACTCGT	2160
TTTGTAAGA	TTTTAGCAAA	TCAATAATCT	GAGCTTGAAT	AGTTACATCC	AAGGCAGTTG	2220
TTGGCTCATC	ACAGATCAAG	ACATCAGGTC	GGCAGGCAAG	GGCAATAGCA	ATAACGATAC	2280
GTGACGCAT	TCCTCCAGAA	TATTGGAATG	GGTATTCATT	AAAACGTCTA	TCTGCGTCTG	2340
GAATGCCAAC	CTTATTCATG	TAGTCAATGG	CCAATTCTTT	CGCTTCTTTA	GCTGTTTTTC	2400
CTTGGTGTTC	TACAATAACT	TCTGTAATCT	GACTACCAAT	TGTTTTAATG	GGGTCCAAAC	2460
TAGTCATTGG	GTCTTGGAAG	ATAGTCGCAA	TCTTAGCACC	ACGAATTTGT	TCCCAATCCT	2520
TGTGAGAAGA	TAAAGCTGTC	AAGTCCTGAC	CACGGTAGTC	AATACTACCT	TGGGCAATAC	2580
GACCATTTTC	TTGAGCATA	CCTGTGAAGG	TCTTTGTCAA	AACAGATTTA	CCTGATCCTG	2640
ACTCACCTAC	CAAGGCTAAT	ACTTCTCCTT	CGACTAGTTC	AAGGGAAACG	CCGCGAATGG	2700
CTGTCAATAC	TTTGTCACGA	ACGTCAAATT	CCACGACAAT	ATCGCGAGCA	GTCAAAATTA	2760
CATT'TTTTC	TTTGTCATT	TCTACTCCTA	TCTATGTGTA	CGTGGATCAC	TAGCATCCGC	2820

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TAAGTTTGA CCAACTACGA AAAGGGACAA GGATACCAAG ACAAGGGTTG TCAATGGAAT	2880
CCAGAACAAG TAAGCATTTG TTGTTACGTT TTGTGAATAA TCCGAAATCA AACGACCCAA	2940
ACTTGGCACT GTAATCGGTA ATCCAAGACC GAAGAAAGAC AAGAAGGCTT CGTATGAGAT	3000
AAAGCTTGGA AGCATTTGAG TCATGGTTGT CACAATAACA GATACCAATT GAGGCATGAT	3060
ATTTTGGCA ACAATCTTCA AGGTTGGTGT TCCCAAAGTA CGTGACGCCA AGTTGTATTC	3120
CAAGTCACGA TAGCGCAAGA TTTGCACACG GATCATGAAG GCAATACCAA TCCATGTTGT	3180
TACGCTCATG GCAAAAATCA GATTCCAGAA TCCAGCTCCG ATTGAGTAAG TCAAGACAAT	3240
AACAATCAAA AGAGGTGGGA TGTTTGAGAT GACGTTGTAA ACTTCCATCA TGACACGGTC	3300
AACTGATTTT GAAATACCCC AAATACCACC GACAAAAACA CCGATAACCA AGTTAATCAC	3360
TGTCGCAATC ACAGAAATGA GGATGGAGTT ACGAGCTCCG AACCAGACAC CGTCAAAGAG	3420
CGATTTACCG TTACTGTCTAG TACCGAACCA ATGCTCCGCA TTTGGCTTGA TATAACGAAC	3480
ACTAAAGTCG TTTACCTTGC TGACATCATT GAAATCAAAC TTAGAAAACA TTGGGTAGAT	3540
GAACTTATC AAAATGATGG CTACCAAGAT TCCCAACATG ACTACAGTTG ATTTTTCTT	3600
CATAAATTGT TTAACACTG ATTTCCAGTA AGAATATGCT GGCGCATCAA TAGTTTCAGA	3660
GGCAAAATCG TCACGTTTAA CAACTGAAA TTTTCTTTA TCGATTGTAG ACATTATTTG	3720
CCTCCTTTCT CAGTCAATTT AATACGTGGG TCAATAATAG TCATCCAAAT ATCTCCCAA	3780
AGACGTGAGA AGATAGAAAT ACATGTAAAG ATGAAGACAA GACCAACGAC CATAGAGTTA	3840
TTAGATGCTT TTACAGAGTC AATCAACATT TTACCCATAC CTGGGAAGGC GAAGACTGTT	3900
TCAGTAAGGG TTGCACCACC GATAACCCCA ATAATGGCAG CAGGAATTCC TGAAACCAGC	3960
GGAAACCATG CATTTTAAA GATGTGTTG TTTGAAATTT CTTTTCAGA CAAACCTTTT	4020
GCACGAGCGA AACGAACAAA GTCTTGAGAT TGCAAGTCAA TCATGTAACG ACGAATCCAA	4080
ATGGCTGTAC CAGGAGCACC CAACAAACCA AGGATGACTG CTGGTAAAC GTAAGAACGC	4140
CAATCTCCAG CTCCAAGAT AGGGAATGAA TCTGGAAGGG CAATAGATGA TCCAATCAAT	4200
CGAACGATGT AAACCAAGGC AATCGTTGGA AGAGCAAGCA AGAAGGTCAA AGCCCCTGTT	4260
GAGAGGCTAT CAATCCAAGT GTTCTTGAAA CGAGCCATGG CTGAACCAAG TGGCACGGCA	4320
AGAGCATAGG CAAGAACCAA ACCAATCAAA CCAGTAATAG CAGAGCTGAC AATCATAGAT	4380
GGATATTGGT AATTACTTTC AGTCGCTGTA TAAGGATCAT CTTTCCATA GCTAGCTACT	4440
TCACGAGAGT CAGCCTGACT AGGTGACTTG TAGGTTCTTG AGTAAATATT TACAGAAGAC	4500
GTTTTCTTAC CTGTTGGGAA CTGAACTTGG GCAGTTTGG TTTGTCCTTG ACCTTGAGTA	4560

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ATAACCTGAA	GAACCTGGTGT	ATTAGCATAG	GTTGGGTAAG	AGTCACCTAA	ATTCAAGTTC	4620
ACAAAGTTT	GATGAACAAA	TGGGAACTGA	CTGTTAAAGT	ACAAGAGATA	TTTATGTTTA	4680
GTTCTGGAAC	CGACCAATGA	CCATCCGATA	GCTGGATCAT	TTTCAAAACG	AAGGTAGCGT	4740
TTCAAGTCTG	GATTTTCAGG	GTCTTGGATT	TTATTTGTAT	GGTCAATGTC	AATCAAGTTA	4800
GCATAGAAGT	GAAAAACACG	TTCAAAAATT	GGAATTTTAC	GAGTAGCATA	GAATTGACCA	4860
CTTTCAGTAA	ATTCTCCCAA	AGTCCAACCA	TGACCTAATT	GATTGATGTA	CTTTTCATAA	4920
ATAGCTTTAT	TGGTCGCATT	TGCTTCTACT	GTTACAGAAG	AATCCATGCT	ACTTGCCTTT	4980
TCTTGCAACT	CTTTAGTATC	GTAATACTCA	ATGTAGCCCA	TACGCTCAAA	CACAGTATTT	5040
TCATAGTTAT	CACGTTTATC	AGCCGTTGTC	GCAATTTTAT	TATAGTTAGG	ATCCTGCTTG	5100
AAAATCAATT	TTCGAGGAAC	CAAGGTATAG	ATAATCGTGT	AGGTCAAAGT	CGTTACTAAG	5160
AAAATCGAAA	CCAATGACCG	CAAAACACGC	ATAAAAATAT	ATTTTTTCAT	ATTATTTTCT	5220
TTAAAAATCC	CAAAAGAACC	TTCTCCTCAT	GGAGAGAAAG	TTCTATTAGA	AATTATTTAC	5280
TTCACATGAC	TTGCCAATTC	TTTTTGAGCT	TTCTCATTTG	ATTCAGCTTT	TTCTTTCAAC	5340
CATTTTTCAC	GAGCTTTTTC	ATACTCTTCC	TTAGTCACCA	CTTTATCTTG	TGATTTCAAA	5400
TATTTGAAGT	AAACATCTGA	CCCCTTAGAG	CCTGTTTGCG	CAGAAGCTCC	AGTAAATGGA	5460
ACAATTCGTG	AAAGCACTGG	TGCTGCACCA	GAAGAAGCCA	TAGCAGGAAT	AAAGAGTGAA	5520
CTATCTGTCA	ACCATGCTTG	AGCCGCTGCA	TATTTTTTCAT	AACGGACATT	CAAGTCGCTT	5580
GTCTCTCTGG	CAGCTTCATC	AACTAATTTA	TCGTATCTTT	TCAAACCAAC	TTGAACTACT	5640
GAAGGGCTAT	TTGGATTATC	AAATCCTAAA	TATGTTTTTG	TAGTTTCACT	GCTAGTTGTT	5700
TTTAAATAT	CCAGGTAAGT	AGATGGGTCT	TGATAGTCTG	GCCCCCATGA	AACTCCTCCT	5760
GATACATCCC	AATCCTCAGA	TGAAGCATTG	GCAGCATAGT	AAGTAATATT	AAGGAATTCA	5820
TCACTTGTCA	TTTGTTGAAT	ATCAACAACG	ACATTTTCAA	CACCAAGAAC	TGTTTCTACA	5880
GATTGTTTAA	AGGACTGAAT	ACGAGATATG	TAGTTTTTTG	ATGCTTGGTC	TACTGGAACG	5940
TCCAGATGAA	TAGGAAACTG	AACGCCGTCT	GCTTCTAAAG	CTTTCTTAGC	TTTCGCAAAC	6000
TCTGCCTTGG	CCTTGTGACG	ATTGAATAAA	CCATCCTGCC	CATCAGCTAA	ATTCACACCT	6060
TTCCACTCAT	CACCATAAGC	AGGAAGTTGA	GCAGCGACTA	AATCACCAAA	GGTCTTCTCA	6120
CCAGCTGAAA	CAAAGTCTGG	TTTTACAAAT	AAATTACGAA	CTGCTAAAGC	TGCTCCATCT	6180
TTACCATTGA	TTTGAGCTGA	GTAAGCTGAG	CGATCAAGAG	CAAAATTCAA	GGCTTGACGG	6240
AAATCTTTGT	TAAGCAATGC	CTTCTTAGTA	GCTACTTTCT	CTGAATCTGT	AGTTTTAGAA	6300
GTATAGTTGT	AACTTTGGCG	ATCAATATTC	ACACCCAGAC	CAGCAATCCC	AGAGCCTGAT	6360

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TGTGTGTAAT AGATATTGTC CTTGTATTCT TCTGCAACCT TAGAATAGTT GGAGCTGGTA	6420
GGGTAAAGAC GGGCATAACT ATAAGCTCCA CTAGTGAAGT TACGCTCTAG CGACTCCTGA	6480
TCTGATCCAT CATAGTAAGC TAGATTGATA GTATCTAGGT GGACATTTTC TTTATCCCAA	6540
TATTGCTCAT TTTTACAAA CTCACAGAA GATTTTGCAG TCAACCCTTT CAACAAGAAT	6600
GGACCATTAT AAAGCAAGGA TGTCGGATCT GTTGGTTTAG CAAAATCGCT TCCTTTTGAT	6660
GTTTCGAATT CTTCATTGAG AGGCCAGAAA ATAGAATAGG TCAACTTAGA GTTCCAGAAC	6720
GGTTCAGGCT GGTTCAAAGT GTATTGTAAC GTATAATCAT CAACCGCCTT GACACCAACT	6780
GTTGAAAAAT CTGTTGAAGT TCCTGATAGA TAATCTGCCA AGCCTTTAAC CGAATTTTCA	6840
GCTAAATACA TAGCTTCTGA TTTTATCTCT GCTGCGTGT TTAACCGTT CACGAAATCT	6900
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GCAAGATTAC CGTAATTATC GTTAGTGAAT AAACCATCAA TCCCATTGTA AGTCACTACT	7080
GTTGTACTAT TTTTACTTGA AATCAGGTAG TCCAAGGTTT CTGGGTCTGC TGTATAACA	7140
TAGCCATAAG CTTTAGGGGC TGATGAATCA GATGATTTTG AAGAACTGCA TGCTGCAAGT	7200
ACACCTGCTG CTAATAAAAC AAGACCTGCT GTAGCAAATA CACGATTTT TTTCAATTTT	7260
TACTCCTCTG TTTATGTGAA TTATAGATTG ACAACCATTA TATCACAATTA TCCATTAAAA	7320
ATCAAAACAAA TTTTCAGAAT ATTTAGGCTT GTTGGCACAA ATTTTTCATT TTTTGTGAAT	7380
ATATGATTCA AATTGTCGTT CGAAGTGTCA AAGACTACAG TGAAAATAGG AAATTTGACG	7440
CAGAAACTTT GGAGTTTAGG AAGACATACA GTAAAATGAA ATACGGACGG AACAATGTGA	7500
TTTTGGAAT CAAATTAAAT TATAACAATA TTGTAGAAGT ATCATTCTAG TATCAAGAT	7560
TCAGTTTACT ATGTCTTTT ACACCAACCT TATCCCGAAT TCAATTACTT TTGTGATTTA	7620
CATATATAGA TTAAGACTAT CTTTATACT TTAATAATTC TCGCTACCTT ATCCACTATA	7680
TGCTCCTCGC TATCACGTTT CTATTCATAG CCTACGATT CACTATTGCT TTCTCTGACA	7740
ATTCTTATTT CCTGCGTCAG ACTTAAAACG ATCTATCCCC AGACCATTTT AATCCGCTAC	7800
CTCAGGATAG TCAGGCTTGG GGAGCGCTAT TGTATTACCC GGTAGTGGAG CCCTACAGAG	7860
GACTTACACC TCAGATGCAC GACATGCCCA TCGTATAAAA AATCTCCTAC CCAAGGTAGA	7920
AGATTTCAAA CTTATAAAAC TTAATCCGTC ATGTCCGATA CCAACATTCG ATGCTCCAAT	7980
GGAATACTGC ACATAACTAG CAAGAAAATA AAGCCTGACT GAATCCAGAA GAGAGCCAAG	8040
TCAAAAATTC CGTGCACAGC AACCCTGTGA AGGAAAGATA GATAAAGGCC GATAATCGGA	8100

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CGTTTCCCCG ACTCCTGACT CATATCCATC ATCAAGCGAA CAGGAGCAAC AGAAGACAAA	8160
ACTAATAAAA TAGTCCCCAC AATFCCGTAA CTCAGAATCG TATCAATATA AAGACTGTGG	8220
GCATGTTTCAT GATAAGGAGC ATGTATCCGA GGATAAGAGT TCATATAGGT CAATGGCCCT	8280
TCACCCCAAA AAGGATTTTG CTTAAACAAG GCCATCCCAG CATCCCAGAT AGAAATGCGT	8340
TCTTCCATAG AAGAGTCTAA AGTACCCATT CGAACTCCCA AATCACTAGA AAAGAGGAAA	8400
CTCAAACCAA TCGCGAAGAC CCCAATACTA AGCCAAAAGG CCTTCCAGTT TTTAATAGTC	8460
GTAAAGAGAT AGATAATTGC TCCAGCGATA ATAGCAGGAA AGGCAGTTCG ATTTTGAGTA	8520
AAGTTCAAAC CAAAGAGATT AACAAAGCCT GCAATCACAC AGAATACTTT CAACCAATTC	8580
AACTGGTTCG TTGTAAACAG ATAGAAAGCA ATCATAATAC AGAAACAACA AATAATTCCA	8640
TAATAATTAG GATTAAAGAA GGTCACCTCT GCGCGTTCT GATGCCACAC CTGCATATTG	8700
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GCAGCTGACA AGACACTACC AAACAAGACA AACTGCAAAA TCAATCGAAA GAATTTATGG	8820
GATAAATCG ACTGATAGTG CAAAAAGAAA ATAGTAAATA GAAACATTCC TACTGAAGCC	8880
ACAAGACCCA TCCAATTTTG TGCAAGATG GATATAACAG TACTATAGCT AAGAAAAAGA	8940
AGCAGCATCG GATGCTCCCC CATTTTCTGA AGAATACTTT TCATGTCTCC TGTAAAAATC	9000
AAACTGATAA TATATAACA GAGTACAACT ACAAAAAGAT AAAAGGGTAA AAAGATACTC	9060
AGGATAATTC CCAATAAAAT CAGCTCTTTA CTAGACAACC CCTTCAGCTT TTCAATAAAG	9120
CCTATTGATT TCAAAATGAA TCCTTTCTCT CCAATCAGC TGATTGAGT AATAGTAAGC	9180
TATCTATAT TGTACCACTT TTTTAGCAAT TTGAAAACAA AGGAAACGTT TTCCAAAATA	9240
AAAACCCAT TTTATCCACC ATATCAAGGC TTCAAAATGA TACTTCAACT CCATTCTCAA	9300
TTACCCGATA AGTCTGATT TGCAAATCAA TTTCTACTAC TGCTGTTACG GACTTATCTT	9360
TATTTTGACG TTGATTACA ATGCTGTGAG CTGTTGGTGT CTCTATCTCA GTAGTCCCTT	9420
CTAGATCAAA GGCTTCTGAA CGGTTACGGA AAGAAAATAG ATTGAGAAG GCCTTCACAA	9480
CAGGTCGTTG CACTTCTTTT GCTATTTCCCT CGTTGCTATA GTAATGACGA TTAATATTTT	9540
GACCTTCTTT AGTTTCTTCT AATAATTTC AATCATTCCT GCCTGCTAAT AGACCCACAT	9600
AGTAAATCTG AGGAATACCT GGGGCAAAAG CTTGAATTAG ACGAGCGAGA AAATACTTGA	9660
CATCATCATC TCCAAGCGCT GAATAGTAGG TTGAATTGAT TTGGTAGATA TCTAAGTGT	9720
TATACTCGGC ACTAGAGTAC TTACGTTTGA CATTGGCTCC AACCTTATAG AGTTCATTTG	9780
AAGCATAGTC AATCTCCTCA TCGGTCAGGA TATCCTTGAC ATCTACTACT CCAATCCCAT	9840
CATGGGTATC TAGCGTCGTA AATTGCTTCA TCGGGCTCAT CTTTAACCAC TTAGCCAAAC	9900

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GCTCTGTTCT	GGAAGTGTAA	AGAGTATAAA	GTGTCACCAT	TGGAAGAGCA	AAATCATAAA	9960
CATAGTAATC	ATGGTCTGCT	ATTTTAAACT	GAATCGAATA	GTGTTTCATGA	ATCTCAGGTA	10020
AAAGCTCTGT	CCCATACTCA	GCAGCGATAT	CTCGAACTTT	GTCCAATAAA	TCCCAAATAT	10080
CTGGTTCCAC	AAAGAAATCA	TTAGTATCCA	ATTTCTTCAC	TGCATAAGCA	AAGGCATCTA	10140
GACGAATCAA	ATCACACCCA	TTACTTGCCA	AGTGCTGAAT	GGTCTTACGG	ATAAATTCCA	10200
TAGTTACTTC	TTTGGTCACA	TCAAGATCAA	TCTGCTCCTC	ACCAAAGGTA	TTCCACAAAT	10260
GTTCACATGA	ACCATCTTCA	AACACAATCT	CTTGCTTTGG	TGCACGATCC	TTACGCTTGT	10320
AAATTAATC	TACATCAGAC	TGTGTCGGAC	GGTTTTCTGG	CCAAAACCTA	TCCCAGTTTA	10380
AAAAGAGAGC	TTTAAATTCA	CTGGCTTCAT	GTTTTTCTTG	ATAGTCCTTA	TAATACTTGG	10440
ATTGACGAGA	AATATGATTA	ATCATAAAAT	CAAACATAAG	ATAATATTTT	TCACCTAAAC	10500
GCTTCACATC	CTCCCAATCA	CCAAAAGCTG	AGTCCACTTC	GTCGTAGTCA	ACTGGCGCAA	10560
ATCCACGATC	AACTGTTGAT	GGGAAAAATG	GTAAGAGGTG	AACTCCTCCA	ATAGCATCTC	10620
CAAAATGCTC	TTCCAAATTA	TCATATAAGT	CTTTAAGATT	ATTTCCAAGG	CTATCAGAAT	10680
AGGTAATCAA	CATGGTTTTA	TTTGAATTG	GCATCATTAC	TCTCCTTTTT	CTAATTGAAG	10740
CCAAGTCTCA	TATGATCTGG	CTTCATAAAT	AAAATTCATT	TTAAATCTCT	ATTTATCATC	10800
AAACTCGTAC	TAATATAGAC	TGTGATAAAC	AAAGTACTAC	TTTCTTGTTT	TCTGCATAGA	10860
ATTATCAACA	AGCTAAACTC	TTCTCTGTG	TCAAAGACTA	TAGATTCCAT	GAGCTCTTCT	10920
TATACTCTTC	GAAATCTCT	TCAAACACG	TCAGCTTCAC	CTTGCCGTAG	GTATGGTTAC	10980
TGACTTCGTC	AGTTTCATCC	ACAACCTCAA	AACAGTGTTT	TGAGCAACCT	GCGGCTAGCT	11040
TCCTAGTTTG	CTCTTTGATT	TTCATTGAGT	ATTACTTCAC	TGCCCCGTG	CTCATTCCTG	11100
AAATGATATG	GCGTTGGAAG	AAGAGATAGA	CAATGGTGAT	ACTGATAATG	CCGACCACGT	11160
AAGAGGCAAA	GCTTGSTCCG	TAGTCGTTGA	AATATTGGCC	TGCGTAGTTG	TATTGGAACA	11220
AAGGCAGAGT	CCACATTTTG	GAATCCCGGT	TCAAGACAAG	GAGTGGCAAC	ATGAAGTCAT	11280
TCCAGAACCA	AAGGGCATTG	ATGATCATGG	TTGTCGCATG	CATCGGTTTC	ATCATTGGGA	11340
AGATGATGCG	GAAATAGGTT	GTAAATTGAT	TAGCCCCATC	GATCTCTGCT	GCTTCATCCA	11400
GACTTTCTGG	AATCGAGATT	TTGATATAGC	CAACATAGAG	AAAGAGGGTC	TGTGGAATCG	11460
CATAGGTCAA	GTAGAGCAAG	ATCAAACCAA	AGGTATTAGC	CAAACCGAGT	TTACTCATCA	11520
TAACCGTAAT	CGGAATCATG	ATGACTTGGA	AAGGTACGAA	GATTCCGAGG	ATTAAGAGGG	11580
TATACATGAT	GGTAAAGGCT	TTTCTTTTAC	TCATATTGCG	AGCGATGGAG	TAGGCTGCCA	11640

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TAGGGATAAA	GATCATTACT	GCAAGTAAAG	ACAAGACAGT	GATGACGACA	GAGTTCCAAT	11700
AATAGCCTCC	AATCCCATCA	GCTAAGAGAC	GGCTAAAGTT	GTCCCATGTG	AAGTTGGTTG	11760
GAAAGCCAAA	GAAATTATCT	ACAATATCCT	TAGTGGGTTT	GAAGGAACTA	AAGAGGGTAG	11820
CAAGGAGCGG	CACTAAAATC	AGAACCGATC	CTAGAATCAA	TAGAATGTAT	TTGCCAATCA	11880
GGGCTTTTCT	TTCATCTTGT	TTCATCATGC	TTCTCCTCTT	AAATTTCAAA	TTTCTTAGAT	11940
ACTCTCAATT	GGATGATCGA	AATCACTACA	ATTAAGAAGA	ACAAGATTAC	GGCAATGGCA	12000
TTGGCATAAC	CGAATTGGTT	GTCTTTTAAAG	GCATAGTTAT	AAACCAAGAG	CCCAAGTGAG	12060
GTTGTGGCAT	TGTTTGGACC	ACCACCGGTC	ATGGCAAAGA	CTTGGTCAAA	GGCAGTCAGC	12120
CCACCTTTTA	GGGCTAGGAT	AAAGACCATA	GAGACACTTG	GTAGCAAGTA	AGGCAATTCA	12180
ATGTTCCAGA	AAACTTGCTT	GCTAGTCGCA	CCATCAATCC	TTGCTGCCTC	TGTAATCTCA	12240
GTTGGAATAG	ATTGCAAACC	AGCTAGGAAG	ATGATGATGG	GCATAGCCAC	CCCTTGCCAA	12300
AGAAGGACAA	AGACAGCCGC	AAAGATTGCT	CCCCACTTAG	TCCCTAAAAG	ACTGGTTTGG	12360
AAAAATTCAA	TATGAAGGGC	ATTTCCAATC	GCTGGAAGAC	CGTAGTTGAA	GACTTGCTTG	12420
AAGATCAAAG	CCACTGTCAA	ACCAGATAAA	ACAGCTGGGA	AGAAGAACCA	AGCACGGAAG	12480
AAGGTTTGGC	CTTTGATTTT	AGAATCAAG	ACACGCGCAA	TGAAGATCCC	GAGTGCAATC	12540
TCACCAACCA	CCATGGCAAT	CGCAATGATT	GCGGTAAAGC	CAATCGCATT	CATGAATTTT	12600
GGATCCATGA	AGAGGAGCTT	AAAGTTGTTT	AAGCCAACAA	ATTTGTAGTT	ATAAGTCAAT	12660
CCTGTCCAGT	TGGTAAAACT	GTAAAAGGCT	CCTTGAAACA	TCGGCACATA	GAAGAAAATT	12720
GCTTGTAACA	AGAGGGGGAT	GACCACAAAA	GCCCATGCCC	AATATTTTIG	TAATACTTTT	12780
TTCATAGTCT	CTCTACTCCT	AATCCACATC	CGCTTTCATC	GGGTAAAGA	AGGCATTCAA	12840
ATCATTGACC	ATGCCTTGTT	TATCACCGGT	CAAGACATAG	TTCATGGTCA	AGGTATGGAA	12900
GTCTGCTTCA	CTGGTCCAGT	ATTGTTGCAA	CCAGACCAAG	TGACGATCCG	TAAAGGCATA	12960
TTCGGTCATA	CCAGCAAGCG	GTGAATCTTC	TCCTGCTTGT	TTGACCCCTT	CGATCGCTGT	13020
TGGAGATCCG	TCCACATCGT	AGTATTTTTG	CATGACTTCT	GGACGGGTCA	TATATTCAC	13080
AAAGGCATTG	GCTTCTTTTG	GATGTTTGGT	GGTGGCTGAG	ATAGACCATG	CCAAGTCTCC	13140
CGCACCAACG	GTTAAGCTTT	GTCCTTTTTT	TTTTCCTGGA	ATCATGAAGG	TCCCAATCTT	13200
AAAGTTCGGT	TTTGTTCAT	TAATCGCTGT	GATCGCCCAA	GACCCATTG	GTGTCATGAG	13260
GACATCCCCA	CGTGCGAAGG	CTCCGATAAC	ATCGGTATAG	CCAGCACCTT	CCCAGTTCTT	13320
TTGCTTAGAT	CCATTGATGC	GAAGGATGTC	CATGACCTTG	ATATCATCTT	TCATAATCGG	13380
ATCCGACAAT	TTAATGGCAT	TTGGTTGAGA	ATAACGAAGG	TATTGATTG	CTTCTTTTCC	13440

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TCCACCTGTT GCTGTCGCAA AGGCTAATTG ATTGTAACCA TTGAGTGTCC AAGCATCTGC	13500
ACCTGCAATT CCAAATGGTG TTTGTCCTTT AGCAACGATA TCTTTGACTA ACTGTTCAAA	13560
TTCATCCCAG GTTTCAGGAA CCTTCAAGCC CAGTTCCTCG AATTTATCTT TGTGTAGTA	13620
AATTCATATA GCATTAGCTG TAAAAGGAAC GTTGTAAGCT TTTTCGTTTA CAGCATATTT	13680
TTGAGCGTAG CCATTTTTCG CGCGTTTCAG GTAGTCTTTG TTGCTCAAAT CTTCAAAAAC	13740
ACCTGCTTTT GCCCATCTCT GCAGTTCGAT GGACTGTGGG TAAATATTGA CCACATCAGG	13800
CACATCTCCT GCGAGAAGCG GTGTCTTCAA TACTTCACCA GCATTTGGTA CATTGACGAC	13860
TTTGACCTTG ATCTTACGGT TTTCTTCTC AAAATCACGA GTGATTCTT CCAAGGTTTT	13920
GGTCATTTCT TTTTCTGGT TGAAATACTC GATGGTCACT GTGCCATCCG CAGATTTACC	13980
ATAGTTGGAG CAAGCGCCGA GCCCAAACAA AGCTAAACCT GTAGTTGCAA GAAGTCCGAT	14040
TTTTTTATAC CATTCCATTA GAAAGCCTCC TTTATAAATT TATACACCTT TATTGAACTG	14100
CACCCCAAAA GTTAGACAGA ATAAATCTAA CTTTGGGGT CAGTACATAT CATAGTTTTC	14160
TAAAAATATA CTGTCTACTC AAAAAATCTC CTTGGGATAA GATAACAGTT AAGCCCGCAT	14220
ACATTAGTTC TGCACCTGAG TAAACTTCGC CATTTTCCTG TAATTTATAT AGTCCCTCTT	14280
CATCCAAATC TTTTAATTTT AAAGTTGTTT CCATGGTCTC TACAACAGAT AAAACGCGAA	14340
CGTAGGTTAC AATCGTTTGA TTTCCGTAAT TAAATTGTAC AGCTGCTTCA TTGGATACAG	14400
TATCAGGATT AATTAGTCTA TACTGCTGTC CTAAGTGAAC TACTGGTCGT AATTCTTTAT	14460
ACAAGTTCAC CTGATTAGCA ATCGTAGCTT TCTCTTCATC TGATAAATTT GTCAAATCAA	14520
GTTCATAGCC CAAATTTCCC ATCATTTGCTA CAAGGCCACG TGTTTCTAAT GGTGTCATTC	14580
GTCCCATCTG ATGATTCGGT ACTGCTGACA CATGAGCCCC CATAGAAATG GTTGGATAGA	14640
GATAGGATGA ACCGTATTGA ATTGGTAAAC GTGCAATGGC ATCAGTATTA TCACTAGCCC	14700
AGACTTGTGG GAAATAGCGC ATCATACCAA GATCATTTCTG TCCACCACCA CCAGAGCAGG	14760
ACTCAAAGAG AATATGGCTG TGCTTCTCTG TCAGATAAGA AACGAGTTCA TAAAGCCCCA	14820
GCATGTACTG ATGAGATTGC ATCTGTGCTC CTAGATAAGT TAATCCATTC CCTAGCTTAG	14880
TGATATTGCG GTTCATATCC CATTTAATGT AATCAATATC ATGATAAAAT AGGAGTTGAT	14940
CTAAGACACT TTTCAAGTAT TCTACTACCT GAGGATTGGC AAGATTAGT ACTAATTGAT	15000
TCCGAGAATA AGTATGCTCA TAGCCAGGAA CCTGAATAGC CCAGTCAGGA TGTGACGAT	15060
ACAAATCACT ATCTACAGAA ATCATTTCTG GTTCTAACCA AAGTCCAAAC TGCAAACCTC	15120
TTTCATGGAT AGCTGAAATC AGACTTTCTA GACTTCCACC CAGTTTTTCC TCATTAACAA	15180

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CCCAATCACC TAAAGCACGA TTATCATCAA AACGATTGCC AAACCAACCA TCATCTAATA	15240
CAAAAAGTTC AATGCCAACT TTCTTAGCTT CATCTGCTAA CTCTAACAGT TTTTCTCTCT	15300
GAAAGTCAAA GTAAGTAGCT TCCCAGTTAT TGATTAGAAT TGGACGTTCT TTTT TAGAAA	15360
ATTCACCTAG CATAATGTGC TTCAGTACAA AATTCTGACT TTCATGACTA ATACCAGTTA	15420
ATCCCTGATC TGAATGAGTC ACTAAAGCTA CCGGTGTTTC AAAGTATTCC TCAGGAGCTA	15480
ACTTCCAAGA AAAGTTTCTT GGATTAATGC CAATAGCCAC CCGAACTTCA TTCAATTGAT	15540
TTTTTTGAAC AAAAGCTTCA AAGTTGCCAC TATACATTAG TTGAATAGCA AACACATTCC	15600
CAGCATCCTC TGTGACTCCT TGTTCGCATA GTAGAAGAGC TGGTGTGTTGA GCATGACCAG	15660
AAGCACCTCG GTTTGAACTA ATCGAAAAGA TTCCTTGTTT TACCTGTGTA CGTCTAACAG	15720
TCTTTTCACG AGCATAAGCA CCCTGCAGAG TTAATCTGCA GCTGAAAAAT	15780
CAGCCATAAA AGAAAAATCT TTATGGATGA CAACTTCCTG ATTACTATTA TTATCTAATT	15840
TACTGTAGCT AGCAATAGTC GCATCATTAT TAAAAGTAGT ATAATACAAA GTCAGACTAA	15900
GTTGAGCCTT AGAATCTTCT AACATTAAGA CAAGAGTCTC TGTATCGTCC ATGCTATGTG	15960
GAGAAGGTAA GCCCTGTGGA CCATTCTGAC CTTTTAAAAT CTTTGCCTCT ACAAATCGAA	16020
AGTCTGTTAC TTCAGTTACA CTATGCTGAA CCTGTATGGT TGGTTTCCTA AAATCTCCTA	16080
AGCCATGTTG TCCAAAAATC TGTGCTGAG TATCTAACT AAAGGTTTGA TTAGTAGCCG	16140
TTGGATTTC TGAAGAGCA TGGTCTCGTT CATAAACACT ATTGGAACCT TTATAGTTCT	16200
TAATAGTCTT TCCTAAATGT TTCAAAAGTA AGTAGCCATT TCGATTTTCA ATAATCAAAC	16260
TTAGATTTT ACTCTCAACA TAAAATAGAT TATTCTCTAT CCTAACTCCC ATTTACTTCA	16320
CCTCATCACT TTATTGATTA TATTTTATCA CCTGAAATCG CTTTCCAAA TAGAAAAATG	16380
TCTCAAGAAT ATGGTAAAAT GTTAGGTAGG AGGTAGCACA TGTTAGTTTT TTCAGAATAC	16440
CAGACTGGAA CAATCGACCT TGCCCTAAGC TTTTATGGAT ATGAGGAATG CACACCTAAT	16500
TACTCTTTTG GTCCAGCCAT TCGTGATACA TACGTTCTAC ATTACATTAC TAAAGGACAA	16560
GGAAAATTTC ATTACAAGGG TAAAATTGTT GATTTAAAAG AAGGAGATTT CTTTCTATT	16620
AAACCAGAGG AACTAACCTT TTATCAAGCA GATAGTAAAG AACCTTGGGC CTACTACTGG	16680
TTAGGAATCA CTGGAGGGAA AGCCCTGAT TATTTTGCTC TTTCCCAAAT TTCTGATCAA	16740
TCCTATCTCA TCCAATCTGA AACTTGTCAT ACCCAGACTA CTGCAAAACT CATCTCAGAC	16800
ATTGTCGGCT TCGCTCAGAT TACAAAATCA AGTGAATTAG CTCAACTCCA TATCATGGGA	16860
CAACTTCATG AACTGATGTT TCATCTGGGA ACTATTGCTC CCAATCAGAA AAAAAAGAA	16920
ATTTTCATCAA CCCACCAACT CTATCTTGAA TGCAAACGAT TAATTGATAG CCACTATCCT	16980

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CAATCACTTA CAATTCAAGA TTTAGCAAAA GAACTATCCG TTCACAGAAG CTACTTATCA	17040
AGCGTATTCA AAGAATTAA TACCTTATCA CCCAAAGAAT ACCTACTCTA CGTTCGAATG	17100
CACCGAGCTA GACAACCTCT CGAAAATACC CAAGAGTCCA TCAAGGTAAT TGCATACCTG	17160
GTAGGTTTTT CAGATCCACT CCATTTTTCG AAAGCTTATA AACAACTACT TAATCAGACT	17220
CCAAGTCATA CAAGAAAAGA ATACTCTCAA TACCAACTAG TAAGAAAGGC AACATTATGA	17280
AATCTACCA AGCTGTCTAC CAAATCCTAT CTAAAGAAAC CGACTATATC AGCGGAGAAA	17340
AAATCGCAGA AAACTATCC CTAAGCCGAA CAGCAATTTG GAAAGCCATC AAGCGACTAG	17400
AACAAGAAGG CATTGAAATT GATAGTATCA AAAATAGAGG ATATAAACTG ATGAATGGTG	17460
ACCTTATTCT TCCAGAGATT CTAGAAGAAA ATCTTCCAAT TAAAGTCAGC TTAAACCCG	17520
AAACAAATC AACACAATA GATGCAAAAG AAGCAATTGA TTTAGGCCAT GAAGCAAATA	17580
CCCTCTATCT AGCTTCCTAT CAAACAGCAG GCCGAGGCCG TTTTCAACGT TCCTTCTACT	17640
CACCACAAGG TGGTATTAT ATGACACTCC ATCTTAAACC AAATCTCCCC TATGACAAAT	17700
TACCATCCTA CACACTACTT GTAGCTGGAG CTGTCTACAA AGCCATTAAG AACCTAACTT	17760
TAATAGATGT CGACATAAAA TGGGTCAATG ATATCTATCT AAACAATCAT AAAATTGGAG	17820
GAATCCTTAC TGAAGCAATG ACCTCTGTAG AAAGTGGCTT AGTCACAGAT ATCATTATTG	17880
GAGTAGGTAT CAATTTCACT ATTAAGACT TCCCTCAGGA ATTAAGAA AAAGCTGCCA	17940
GCTTATTTAA AGCTACAGCT CCTATAACAA GGAATGAATT GATCATAGAA ATCTGGCGTG	18000
CTTCTTCGA AACACCAGCA GAAGAGCTAT TATACCTATA CAAAAACAG TCATTCAATC	18060
TAGGAAAAGA AGTCACTTT ACACCTAGAGC AAAAAGACTA CAAGGGACTT GCTAAAGACA	18120
TCTCAGAAA TGGAAACTT TTAGTTCAAT GTGATAACGG AAAAGAAATC TGGCTAAATA	18180
GTGGCGAAAT TTCTCTCAAT AGTTGGAAGT AAAATAACAC AATTATAATA TAAACGATAT	18240
AAAAATAACT TCAGATTAGT AATTCAATTA AGTTTACGG ATCTGAAGTT TTATTGGCTC	18300
TAAAAATAA AAAGAGAGTT ACAGACTCTC ATTAACCGG AGAATAAGGG ATTCGAACCC	18360
TTGCGCCAGT TACCCGACCT AACGATTAG CAAACCGTCC TCTTCAGCCT CTTGAGTAAT	18420
TCTCCAATTA ATGGGCACGA GTGGACTCGA ACCACCGACC TCACGCTTAT CAGGCGTGG	18480
CTCTAACCAC CTGAGCTACG CGCCCAAGTT AAAAACTTG GTAATTTGAA CAAAGTTCAA	18540
AGCGGGTGAC GAGAATCGAA CTCGCGACAA CAGCTTGGAA GGCTGTAGTT TTACCACTAA	18600
ACTACACCCG CATAAATACT ATCAATAAAA TGGCGCGAGA CGGAATCGAA CCGCCGACAC	18660
ATGGAGCTTC AATCCATTGC TCTACCAACT GAGCTACCGA GCCTTATTGC GGGAGCAGGA	18720

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TTTGAACCTA CGACCTTCGG GTTATGAGCC CGACGAGCTA CCGAGCTGCT CCATCCCGCG	18780
TTAATAATAT AAAAGGAGGA TGTGGGATTC GAACCCACGC ACGCTTTTAC ACGCCTGACG	18840
GTTTTCAAGA CCGTTCCCTT CAGCCGGACT TGGGTAATCC TCCAATATTC AAATGGACCT	18900
TGTAGGACTT GAACCTACGA CCACTCGGTT ATGAGCCGAG AGCTCTAACC AGCTGAGCTA	18960
AAGGTCCGAC AAGATCATTA TAGCGGCGAA GGGGATCGAA CCCCCGACCT CCCGGGTATG	19020
AACCGGACGC TCTAGCCAGC TGAGCTACAC CGCCATGAAT CGGGAAGACA GGATTGGAAC	19080
CTGCGACACC TTGGTCCCAA ACCAAGTACT CTACCAAGCT GAGCTACTTC CCGAGTTAAA	19140
TAGAAAAATG CACCCTAGAG GACTCGAACC TCTAACCGCC TGATTCTGTAG TCAGGTACTC	19200
TATCCAGTTG AGCTAAGGGT GCTCCATATT ATGCCGAGGA CCGGAATCGA ACCGGTACGA	19260
TCGTTACCAA TCGCAGGATT TTAAGTCCTG TCGTCTGCC AGTTCCGCCA CCCCAGCCTC	19320
TCTAAGCGAA CGACGGGATT CGAACCCGCG ACCCCACCT TGGCAAGGTG GTGTTCTACC	19380
ACTGAACCTAC GTTCGCACTG TTTTCTTCTA TCTAAAAATG CCGGTACAT GACTTGAACA	19440
CGCGACCCTC TGATTACAAA TCAGATGCTC TACCAACTGA GCTAAGCCGG CTCATTGTGT	19500
ATATCTTAAT GCGGGTTAAG GGACTTGAAC CCCCACGCCG TTAAGCGCCA GATCCTAAAT	19560
CTGGTGCGTC TGCCAATTCG GCCAAACCCG CATATATGAC CCGTACTGGG CTCGAACCG	19620
TGACCCATTG ATTAAAAGTC AATTGCTCTA CCAACTGAGC TAACGAGTCT AAAATAACTT	19680
GCGTTACCTT AAACGGTCCG ACGGAATCGA CCCGGTAC	19718

(2) INFORMATION FOR SEQ ID NO: 100:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 4117 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 100:

CCGTGGAAAA GTCTGGATAG TGAATGGTCT TCACACAATG ACCTGAAAGA AGCCTGAGAA	60
TAATTATGGA GAGTAGCAIT CTGAGAGGTG TTAGCAGAAC CATATGACAG AGCTGTTTGA	120
AGAGGGAATA TTGAGGAGAA AAATCCTGAG CCTACCAGTT GGAGTTGGAA AGAGCTGACT	180
GTTAGATCAT GGTTTATTAT CCACAACCTG TGGATAACTT TGTGAATAAG AGAAGTTGCT	240
AAAGAAGGAG ATATATAACG ATGAAGAAAA TCAAACCGCA TGGACCGTTA CCAAGTCAGA	300
CTCAGCTAGC TTATCTGGGA GATGAACCTAG CAGCTTTTAT CCACTTCGGT CCTAATACCT	360
TTTATGACCA AGAATGGGGG ACTGGACAGG AGGATCCTGA GCGCTTTAAC CCGAGTCAGT	420

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TGGATGCGCG	TGAGTGGGTT	CGTGTGCTCA	AGGAAACGGG	CTTCAAAAAG	TTGATTTTGG	480
TGGTCAAGCA	CCACGATGGC	TTTGTCTTTT	ATCCGACAGC	TCACACAGAT	TATTCGGTTA	540
AGGTCAGTCC	TTGGAGGAGA	GGAAAGGGCG	ACTTGCTCCT	TGAAGTATCC	CAAGCTGCCA	600
CAGAGTTTGA	TATGGATATG	GGGGTCTACC	TGTCACCGTG	GGATGCCCAT	AGTCCCCCTC	660
ATCATGTGGA	CCGAGAAGCG	GACTACAATG	CCTATTATCT	GGCTCAGTTG	AAGGAAATCT	720
TATCAAATCC	TAACATATGG	AATGCTGGTA	AGTTCGCTGA	GGTTTGGATG	GATGGTGCCA	780
GAGGAGAGGG	CGCGCAAAAG	GTTAATTATG	AATTTGAAAA	ATGGTTTGAA	ACCATTCGTG	840
ACCTGCAGGG	CGATTGCTTG	ATTTTTTCAA	CAGAAGGCAC	CAGTATCCGC	TGGATTGGCA	900
ATGAACGAGG	GTATGCAGGT	GATCCACTGT	GGCAAAAGGT	GAATCCTGAT	AAACTAGGAA	960
CAGAAGCAGA	GCTGAACTAT	CTTCAGCAGC	GGGATCCCTC	GGGCACGATT	TTTTCAATCG	1020
GAGAGGCAGA	TGTTTCCATC	CGTCCAGGCT	GGTCTACCA	TGAGGATCAG	GATCCTAAGT	1080
CTCTCGAGGA	GTGGTTCGAA	ATCTACTTTC	ACTCAGTAGG	GCGAGGAACT	CCACTCTTGC	1140
TTAATATTCC	GCCCAATCAA	GCTGGGCTCT	TTGATGCAAA	GGATATTGAA	CGACTTTATG	1200
AATTTGCGAC	CTATCGCAAT	GAGCTCTATA	AAGAAGATTT	GGCTCTGGGA	GCTGAGGTAT	1260
CTGGTCCAGC	TCTTTCCGCA	GACTTTGCTT	GTCGCCATTT	GACAGACGGC	CTTGAGACCA	1320
GCTCTTGGGG	AAGCGATGCA	GACTTGCCCA	TCCAGTTAGA	ACTCGACTTA	GGTTCTCCTA	1380
AAACTTTTGA	TGTAATTGAG	TTAAGAGAAG	ATTTGAAGCT	AGGGCAACGA	ATCGCTGCTT	1440
TTCATGTGCA	AGTAGAGGTG	GATGCTCTCT	GGCAGGAGTT	TGGTTCGGGT	CATACTGTTG	1500
GTTACAAACG	TCTCTTACGA	GGAGCAGTTG	TTGAGGCACA	GAAGATACGT	GTAGTCATTA	1560
CAGAATCACA	GGCTTTGCCT	TTGTTGACCA	AGATTTCCCT	TTATAAAACT	CCTGGATTAT	1620
CAAAAAAAGA	AGTTGTTTCAG	GAAGTAGCAT	TTGCAGAAAA	AAGCCTAGCT	GTGGCAAAGG	1680
GAGAAAATGC	CTATTTTACA	GTTAAGCGCA	GAGAATGTAG	TGGTCCTTTA	GAAGCTAAGA	1740
TTTCGATTCA	ACCGGGGACA	GGTGTCCATG	GTCTCGCCTA	TCAGGATGAG	ATTCAAGTCC	1800
TTGCGTTTCA	AACTGGTGAG	ACTGAAAAAA	GTCTGACGCT	ACCAACCTTG	TATTTGCGAG	1860
GAGATAAAAC	CTTGATTTTC	TATCTGAACC	TAACGGTGGA	TGGTCAGCTT	GTGGATCAAC	1920
TTCAAGTCCA	AGTTTCATAA	AAGAAGAACC	TTTGCGCGAT	GCAAAGGTTC	TTTTGGTTAT	1980
TAGTGACTTG	GTAACCAGCT	GAGGGTGAAA	GTTAGTTGTT	CAGCTTTTAA	GAGGTCTTGG	2040
TGTTGAATAG	TTGATACGAG	TGTTTTGTCC	AGTCGGCATT	CTTTGACAAA	GTTAAATG	2100
TTGTGGTTTT	GTTTAGTATG	GATATCCAGC	CATTTATCTT	CTTTAGCGAG	GTAGACTCGT	2160

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AGATGCTCAA AGAGAGGGAT TCCGAGGTCA TAGCTTGGTT TTCCTGGACA GGTGGGATAA	2220
AATCCGAGAG CTGACCAGAT GTACCAAGCA GAGAGACTAC CATTTGTCCTTC ATCTCCAGGA	2280
TAGGCTTCCC AACTTGGGTG AAAAGCTTTC TGACGGAGCG TCTTGATAAG AAGGGCAGTG	2340
TAGTCAGGGT AATCGCTGTA ACGGAAGAGA TAAGGAATGT GGAAACTAGG CTGGTTGGAA	2400
ATGGCTATTT GTCCAAAAGG AGCAGTAGCC ATCTCGCTCA TTTCGTGAAT TTCGTAACCA	2460
TAGCCTGTTG TTTCAAAGAG GGGAGCATCT TGACAGGCTT TCAAAAGATA GTTGCTAAAG	2520
GTTTCTTTTC CACCCATCAG TTGGATTAAG CCAGGGATGT CGTGGAGAAC GCCTAAAGTA	2580
GCTTGAATGG CAGAGCATTC AGCGTAGTCT CGCCCCAAC TATAAGGAGA GAAGTCAGGG	2640
TGAAAGTTTC CTTGATTGTC TCGTGCTCGC ATGTAACCTG TCTCAGCGTC AAATAGCTGG	2700
CGGTAATTTT GTGAAGCAGC CTTGTAGGTT TCAGCGATTT CTATGTTCTC TAGTTTTTTG	2760
GCACAGCTGG CGATACAAAA GTCACTATAG GCATAGTCTA GAGTATGGCT AACACTTTCG	2820
TGGTGGTCGG TAGAGAGGTA ACCTAGTCTT TGGTATTGGG CTAGTCCGTG GCGGCCATTG	2880
ATGCCGAGAG GGTCCGCTTT GCTGGCTGTT TCGAGCATGG CTTGGAAGAG TTCTCCTTCT	2940
AGGTCGGGGG TCATGTCCTT GCAGGCGCTA TCTGCGATAA TACCGTCTAA AAGTGTACCT	3000
GGCATCATAC CCCGTTTCATC TGGAGCCAGC CATTTTGGAA GGAAACCAGT ATCGCGGTAG	3060
CTATTGAGGA AACCTTCTAA AAAGCGTTGA TAGTGCTCCG GTATGATAAG GGCAAAGAGG	3120
GGGAAGGTGG TGCAGAAGGT ATCCAGAAA CCATTGTTGC TAAAGAGGAC ACCAGGCTTG	3180
ACAGTACCAG TAGCCAGATC CATGTGGATG GCTTGCCCTG ATTCAATTAAT CTCATAAAAA	3240
GTCTGTGGGA AGAGGAAGAG TCTGTAGAGG CAGTGGTCAA AGAAGGTTTCG GTCAGCCTCT	3300
CCTGTCTCTA TAATGTCAAA ACGATGGAGG AGATTTTCCC AATCCACTTG GGCACCTGAT	3360
TTACAGCTAT CAAAATCTTC TTGAGGTAGA TTGATTAGAG CTTGAGAAGG AGAGATGAAA	3420
GAAGTGGCTA GTTGCACTC GGTTTGACTA CTTGCTAAGT CAATTTCGCC GTCTCCAGCT	3480
TCTTGGCTGA TAGCAAGAAT ATCCGTGTTT ATTTGCAGGG CAGTGAACAT CGTTAGCGAA	3540
TTTTTGTTAG TTTCAGTTT ACCTTCTTGT CGCAGGGCAA GAGTCCGCTT ATCTACTTGC	3600
TCTACTGTCA GTTCATCTGC TGCCTGAAGA TAGAGGGAGA GGGCTTTGCC TTGCTTTTGA	3660
TTCAAACGAA TAGAAGCACC ATAGCAAGTC GGTGTGAGCT GGGTTTCAAT CTGATAACGC	3720
AGAGAAAAGA GCTTCAAATA GTGAGGCTGG AAGCAAGCTT TATCTATATC ATAAGAAGAC	3780
TGGCGGTGAA AGAGGCTGTC TCCCCCACT TGACTGGTGA CAGGTGTCAG AAGGAGCCAA	3840
GAGTAGTCCC CAATCCAAGG ACTGGGCTGG TGAGTTAATC GAATCCCCTG AAAGATAGGC	3900
AGATGTGGAT CAAAAACCA AGATCCATCC TGGTCACTGG TCTGGGGCAC AAAGTAATTC	3960

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ATCCCCAAAG GCACGCCTGT GTATGGCAGG GTATTTCCTCC GAGAAAAGGC ATGCTTGTG	4020
GTAGTTCCAA AACGGGTATC GATGGTATCA AGTAGTGGTT TCATAGTCTT TCCTTTAGCT	4080
GTTTTTCTAC ATTATATCAG TAATAGAGGG CCTTTAG	4117

(2) INFORMATION FOR SEQ ID NO: 101:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 2727 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 101:

CTGGTTCAAT TATTATTCAC TCTAAGTAGT CATATGTTCT TTATTTATGT GAGTTTTTAC	60
CTTTTAAAGG ATCTTGTTAG ATGGGAGAAG GTTTTAAAAG TGACAGATGA TAATACAAGA	120
AAAGTTCGTT TATTAGTAGC CTTTTTTAGC ATTGTCATAG GCTACATCCT GAGTTCCTTC	180
TTTATTAGCC TGTATCATTT GTGGCAAGAA GCGCTTAGAG GATTATTATG AAATCAAGAG	240
TAAAGGAAAC GAGTATGGAT AAAATTGTGG TTCAAGGTGG CGATAATCGT CTGGTAGGAA	300
GCGTGACGAT CGAGGAGCA AAAAATGCAG TCTTACCCTT GTTGGCAGCG ACTATTCTAG	360
CAAGTGAAGG AAAGACCGTC TTGCAGATG TTCCGATTTT GTCGGATGTC TTTATTATGA	420
ATCAGGTAGT TGGTGGTTTG AATGCCAAGG TTGACTTTGA TGAGGAAGCT CATCTTGTC	480
AGGTGGATGC TACTGGCGAC ATCACTGAGG AAGCCCTTA CAAGTATGTC AGCAAGATGC	540
GCGCCTCCAT CGTTGTATTA GGGCCAATCC TTGCCCGTGT GGGTCATGCC AAGGTATCCA	600
TGCCAGGTGG TTGTACGATT GGTAGCCGTC CTATTGATCT TCATTGAAA GGTCTGGAAG	660
CTATGGGGGT TAAGATTAGT CAGACAGCTG GTTACATCGA AGCCAAGGCA GAACGCTTGC	720
ATGGTGCTCA TATCTATATG GACTTTCCAA GTGTTGGTGC AACGCAGAAC TTGATGATGG	780
CAGCGACTCT GGCTGATGGG GTGACAGTGA TTGAGAATGC TCGCGTGAG CCTGAGATTG	840
TTGACTTAGC CATTCTCCTT AATGAAATGG GAGCCAAGGT CAAAGGTGCT GTACAGAGA	900
CTATAACCAT TACTGGTGTT GAGAACTTC ATGGTACGAC TCACAATGTA GTCCAAGACC	960
GTATCGAAGC AGGAACCTTT ATGGTAGCTG CTGCCATGAC TGGTGGTGAT GTCTTGATTG	1020
GAGACGCTGT CTGGGAGCAC AACCGTCCCT TGATTGCCAA GTTACTTGAA ATGGGTGTTG	1080
AAGTAATTGA AGAAGACGAA GGAATTCGTG TTCGTTCTCA ACTAGAAAAT CTAAAAGCTG	1140
TTCATGTGAA AACCTTGCCC CACCCAGGAT TTCCAACAGA TATGCAGGCT CAATTTACAG	1200

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CCTTGATGAC AGTTGCAAAA GGCGAATCAA CCATGGTGGG GACAGTTTTC GAAAATCGTT	1260
TCCAACACCT AGAAGAGATG CGCCGCATGG GCTTGCATTC TGAGATTATC CGTGATACAG	1320
CTCGTATTGT TGGTGGACAG CCTTTGCAGG GAGCAGAAGT TCTTTCAACT GACCTTCGTG	1380
CCAGTGCGGC CTTGATTTTG ACAGGTTTGG TAGCACAGGG AGAAACTGTG GTCGGTAAAT	1440
TGGTTCACCT GGATAGAGGT TACTACGGTT TCCATGAGAA GTTGGCGCAG CTAGGTGCTA	1500
AGATTCAGCG GATTGAGGCA AGTGATGAAG ATGAATAAGA AATCAAGCTA CGTAGTCAAG	1560
CGTTTACTTT TAGTCATCAT AGTACTGATT TTAGGTACTC TGGCTCTAGG AATCGGTTTA	1620
ATGGTAGGTT ATGGAATCTT GGGCAAGGGT CAAGATCCAT GGGCTATCCT GTCTCCAGCA	1680
AAATGGCAGG AATTGATTCA TAAATTTACA GGAAATTAGG CTGGAGAACC AGCCTTTTTTC	1740
TAAAGATAAG GAGAAATATG AACAAAAAAA CAAGACAGAC ACTAATCGGA CTGCTAGTGT	1800
TATTGCTTTT GTCTACAGGG AGCTATTATA TCAAGCAGAT GCCGTCGGCA CCTAATAGTC	1860
CCTAAACCAA TCTTAGTCAG AAAAAACAAG CGTCTGAAGC TCCTAGTCAA GCATTGGCAG	1920
AGAGTGTCTT AACAGACGCA GTCAAGAGTC AAATAAAGGG GAGTCTGGAG TGGAAATGGCT	1980
CAGGTGCTTT TATCGTCAAT GGTAATAAAA CAAATCTAGA TGCCAAGGTT TCAAGTAAGC	2040
CCTACGCTGA CAATAAAACA AAGACAGTGG GCAAGGAAAC TGTTCACACC GTAGCTAATG	2100
CCCTCTTGTC TAAGGCCACT CCTCACTACA AGAATCGTAA AGAAACTGGG AATGGTTCAA	2160
CTTCTTGGAC TCCTCCAGGT TGGCATCAGG TCAAGAATCT AAAGGGCTCT TATACCCATG	2220
CAGTCGATAG AGGTCATTG TTAGGCTATG CCTTAATCGG TGGTTTGGAT GGTTTTGATG	2280
CCTCAACAAG CAATCCTAAA AACATTGCTG TTCAGACAGC CTGGGCAAAT CAGGCACAAG	2340
CCGAGTATTC GACTGGTCAA AACTACTATG AAAGCAAGGT GCGTAAAGCC TTGGACCAAA	2400
ACAAGCGTGT CCGTTACCGT GTAACCTTT ACTACGCTTC AAACGAGGAT TTAGTTCCTT	2460
CAGCTTCACA GATTGAAGCC AAGTCTTCGG ATGGAGAATT GGAATTCAAT GTTCTAGTTC	2520
CCAATGTTCA AAAGGGACTT CAACTGGATT ACCGAAGTGG AGAAGTAACT GTAACCTAGT	2580
AAAAGATACG CCTACACTCC TATGTCACTT ATGGATGTAG GAGTTCTTTT TACTAGTTTA	2640
AGCAGGACTA AGACAGGTAC TAAGACAAAA TAGCAACTTC TAAACTAAC TTCCAGTTTT	2700
GGGAGAGAGA TGGAAGTTAC TTTGAGA	2727

(2) INFORMATION FOR SEQ ID NO: 102:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 5717 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 102:

TTTTTTGTAG ATTTAAGTGG GGTGCAATTC CTAAAAATA AAAACAATT TTTGAAAATT	50
ATGTTAGCAG GAATGCTTC AAATTCGATT TTATCACTTA CAGGTTTACT TGTTTTATTG	120
TTCACATCGT ATAAATGCT TGGACTCTTA TTTTTTATCA TTAAGTTAGG TATGATTTTT	180
ATTAATTCAA TTCCTTTTTT TCAGTATGAT AGTGGTATTA TTTTAAGATA CTTGAATTCT	240
AACAATAATA ACTTGAATTT TCAATATATA GTTCAACTTT TAATAGCATT TGTTATTATT	300
TATTTTCCTT TGAGTCAACT ATTACAGTTT TTGACACCCA ATATTATTGT TCGTAGTATA	360
GGAGGGGTGG TTGTTTCTAT ACTGCTTCT ATATTATATA TGATAGGAAG GACGAAATAT	420
GTCTACGTA AATAGTTATG TTTTGTCTTA TAAAAAGAA GGTATAATGT ATTTACGTGG	480
TCGGAGTATG CGGGAATAG CTATAGAACC TCAATTTTCG CAAGAATTTA TCAACGATCT	540
ATTTAATAGT TGTAAGGAAC TATTAGAGAT AGAAGAAGTA TTAGGCAGTA AACTAACATT	600
TGAAGTATA ATGAACAAAT TTAAATTCG GATGAGATAG ATATTGATAG TAGATATTCT	660
AGAACTAAAG GTTACTATTC GTTATTTTAT AATGAAGAGT ATAATAAAAT ACAGAATAAA	720
ACAGTATTAG TATTAGGAGC AGGAGTCTTA GGATGTTATA TATCTCTAAG TCTAAGTATG	780
TATGGAGTGA GGAACTTAT TGTCGCTGAT TACGATATAA TAGAACCATC AAATTTAAAT	840
AGGCAAATTC TTTATACAGA GTCGGATGTT GGTAAGGAGA AGATTAATGT TCTTCTGAA	900
AAAATACACA AGTATAATTC AGATGTTTCTG GTAGTACCTA TTTCTATTAA AGTTTCTTCA	960
GTAGAAGAAT TAGAAAAAT TGTTGCGGAA TATGGGAGTA TAGATTTTAT CGTTAAAGCA	1020
ATTGATACGC CCATTGATAT TATAAAAAAT GTCAATCAAT TTGCTGTATC GCATAAGATA	1080
TCCTACATAT CAGGAGGGTT TAATGGATGC TATCTTATTA TTGATAATAT ATATATCCCT	1140
ACCATCGGTT CTTGCTTTGG TTGTCGGAAT ATAAACAAAG ATATAAATAA GTACACTTTA	1200
TCTGATAAGA CAAAGTGGCC GACTACACCA GAGATGCCTG CTATTTTGGG AGGGATAATG	1260
ACTAATTTAA TAATTAAAA ATTTCTGGGA TGTATAATG AAATCCTAAT AGATAACGCT	1320
TACGTTTATA ATATGAGAAA TCATGCTCTA AGTCAAGAAA AATATGTTCT GGAACCGGA	1380
GAATGTCCAA TTTGTAAAAA AATAATAAAG TGAAAGATAA CAATATTAGA GCGAAACAT	1440
TTATTCGTTT AGTTTGTTTT TGCTTATTAT CAGGAGGAGT AGCTTTTTTA TCTGCTATTG	1500
GGCAGTTCAC TGTATAGAA ACACAATTAA TAGTATTGTT CTTGGGTATT ATTTTGCCTA	1560
TATATTATGC TTAATACAAT AAAAATATTC AAACATCATT GGAAATATA GTATGGCTTT	1620

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TTTCATCGTT TGAGATTTTA TTTTGTCTTG TTAATTTTAG AACATTTATT CAGTTACCAG	1680
TGGATATTTT TATTGGTATG ATAATATTTT TAATGCTGTG GATATTTATT ATGTTAGGTA	1740
TAGTGTGTCT TAGTTATTAT ATAACTTTAT TATTTAGCAA GGAGGCTTAG TATGTTTAAA	1800
AAAATAGGTA TAATGAGCAT TTGCATATAT ATAATTATTT TATACTGCTT GAGAATGTAT	1860
CGTATTATCA ATAATATTGA AACAATCTTG CTAACGGTTA TATGCTTAAT GTTATTGTTT	1920
TTTTTAAGAC GTTTATTTGA TAAAGATAAG TAAATAGATG TTAAGTAAAA ATGTAGAATA	1980
TAAAGGAGGT GCAATGAGTA TGATTGAAGT TAGCCATTTA TCAAAAAGTT TTGGTGATAA	2040
AATAGCTTTA AATAATATAA GCTTCACTGT TAAAGAAGGT TAGATTTTGT GATTTTGTAGA	2100
ACCATCTGGT TCTGGAAGA CCACAACGAT TAATATTCTG ACTGGGCAGT TCCTTGCCGA	2160
TAAAGGACAA TCTATTATTT TGGGACAAAA ATCTCAAAAT TTAACAAGCG GTGAATTAAA	2220
GAGAATTGGA TTGGTTAGCG ATACAAGTGG ATTTTATGAG AAAATGTCTC TGTATAACAA	2280
TCTTCTTTT TATAGTAAAT TTTATAATAT TAGTAAATCA CGTGTGATA ATTTGTTAAA	2340
GCGAGTAGGA TTATATGATA GTCGCAAGAT GGTAGCAGGA AAATTATCCA CTGGAATGAG	2400
GCAACGAATG CTTTTCAGCAG GAGCTCTTAT CAACAACCCC GCTGTACTCT TCTGCGATGA	2460
ACCGACCTCA GGTCTAGATC CCACAACCTC TCGAACAATT CATGAGTTAA TTTIAGAATT	2520
GAAAACAGCA GGGACAACGA TTTTCTAAC GACTCATGAT ATGAATGAAG CAACTCTTTT	2580
ATGTGATTAT GTTGCCTTAT TAAATAAAGG GAAATTAGTT GAGCAAGGAG CTCCTTCTGA	2640
ACTCATTCOA AGATATAATA AAGATAAAAA GATTAAGGTT ACAGATTATA ATGGGAATCA	2700
GATAACTTTT GATTTTACAT CACTAGAACA GGTATCTCAG ACTGATCTGG AAAATATTTT	2760
TTCAATTTCAT TCATGTGAGC CTACTTTAGA AGATATTTT ATCACATTAA CAGGAGGAAA	2820
GCTAAATGCT TAAACGGTTT CTGGCTTTGG TATGGTTGCG TTGTCAAATC ATCCTTTCCA	2880
ATAAGAGTAT TTTATTTGCAA GTTTTAGTGC CTTTTCCTTT CACATATTTT TATAAATATC	2940
TTATGGAAAC ACAGGGGAAG GTCAACGATC AACAGGCATT AGTTCTTTTG ATGATGTGTT	3000
TACCTTTTTC TTTTCTTTG GCTGTTGGAA GTCCTATAAC TATTATCTTG TCTGAAGAAA	3060
AAGAAAAGTA CAATTTACAA ACTCTTCTGT TGAGTGGTGT TAAAGGCTCC GAATACATTT	3120
TATCAACTAT GTTCTTCTCT TTTTGTCTAA CTTTGTGAT TATGGGAACT ACTCCTCTTA	3180
TTTTAGGAGT TACAAATTGA CATACTTTTA ATTATATTAC AATCGTCTT CTAACCTCTT	3240
TATCCATCAT TTTATTCTAT TTATTGATAG GTTTAACCGC GAAGAGCCAA GTAGTAGCTC	3300
AGGTTATCAG TCTTCCTGCT ATGATTTTAG TTGCTTCTT ACCGATGCTA TCTGGTTTGG	3360
ATAAGACAGT TGCGAAGATA ACAGATTATA GTTTTATGGG ACTATTTACT AAGTTTTCAT	3420

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CAAAATGGGA GGAATTTTCA TGAATAAAA CTCTAATTCC TAATCTAACA CTAATTATTT	3480
GGATTGTTCT TCTATTAAC TTAATTACGA TAACTATTAG GAAAAAGAAA ATTTCTTAAT	3540
TGAGTTATTT TAATGATTAT AAACACAAGT GGGAAGGAAA AAATGAACTG ATCTTTTGA	3600
CAGCAATTCT ACAGAATAGT CTTATTGCTA TATTTTGATT TGAGTGACG AAAAAAGAAA	3660
AATAACAATA GTGCTCATAC TAAATGCAGA AGTTTGGGT GATAAGATAA CTGATAAATT	3720
GCAATAAAAA ATGCAACATT TTAAATCTC CTCTATAAGT GCTTCAAAA GTGCTTCAAA	3780
ACCTGTCTTG TAATCCAAGT ATTTTGGGG ACGGTGATTA ATAAGCTAGC AAAGCATCAT	3840
TAAGGATTTT TTCGGTAATT GTTGCCAAAT CGGTTAAGA AAATACTCAC GAAGAAGTCC	3900
ATTCGATTC TCATTACTTC CCCTTTGCCA AGATGAATAG GCATCCGCAA AATAAACAG	3960
AATCCCAT TGTTCATTA AAGGTAACA AGCAACTCT TTTCTCTGT CCGAAGTGAA	4020
AGTCTTAAAC TATTCTTTTG GAAAGAGTCT TGTGAGGTGT TCAATAGCAG TCAACATGGA	4080
TTTAGCTGTT TTTACTTGAC AAGTGCTAGT AGAAATAATA GAATAGTAAA AAACCTTTAA	4140
AGCAGTCCAG AGAGGCAGCT AAGGTTAGAC GGTGAAAGGG TGGAGACTAC CCATTTTTCG	4200
TGGAACCTTG CTGTTGGCAG GTTCCTTTT TCGTGGCTTC TGTGGCCAG ACTCTCTCAC	4260
TAGTAAAGGT AAAAGGAGAA ACCTATGCGA GAACATCGTC CAATCATTGC TCTTGATTTT	4320
CCTAGTTT TG AGCGGTCAA GGAATTTT GCTCTTTTCC CAGCAGAAGA AAGCCTTTAT	4380
CTCAAGGTAG GGATGGAGCT TTATTACGCA GCGGGGCCTG AGATTGTGTC CTAATTAAAA	4440
GGTTTGGGTC ATAGTGTCCT TTTGGATCTC AAACCTCATG ACATTCCTAA TACAGTCAAG	4500
TCAGCCATGA AGATCTGTG TCAGCTTGGT GTCGATATGA CTAATGTCCA TCGGCTGGT	4560
GGTGTAGAGA TGATGAAGGC GCGCGTGAA GGTCTTGGGA GTCAAGCCAA ATTGATCGCT	4620
GTAACCTCAGC TCACATCAAC GTCAGAAGCT CAGATGCAGG AGTTTCAAAA TATCCAAACC	4680
AGTCTGCAAG AGTCTGTGAT TCACTATGCC AAGAAGACAG CTGAAGCTGG CTTGGATGGT	4740
GTGTTTGCT CGGCTCAGGA AGTACAAGTC ATCAAGCAGG CTACCAATCC AGATTTTATC	4800
TGTCTGACAC CAGGGATTG TCCAGCTGGT GTTGCAAGTG GAGATCAAAA ACGAGTCATG	4860
ACACCTGCTG ATGCCTATCA AATCGGCAGT GACTATATCG TAGTGGGACG TCCCATTACC	4920
CAAGCTGAGG ATCCTGTTGC AGCTTATCAT GCCATCAAGG ATGAATGGAC ACAGGACTGG	4980
AATTAAAGAA CTAGATTAGA AAAATAAAAG GAGAATACCA TGACACTTGC TAAAGATATC	5040
GCTAGCCACC TCTTGAAAAT CCAAGCCGTT TACCTCAAAC CAGAGGAACC CTCACTTGG	5100
CCATCTGGTA TCAAGTCACC GATTTACACT GATAATCGTG TGACACTAGC CTATCCAGAA	5160

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ACTCGTACCC TAATTGAAAA TGGTTTTGTG GAAGCTATCA AAGAAGCCTT TCCTGAAGTA	5220
GAAGTGATTG CAGGAACTGC AACAGCAGGG ATTCCACACG GAGCCATTAT TGCTGATAAG	5280
ATGGAAGGTC CTTTTCGCTA CATCCGTAGT AAACCAAAAG ACCACGGAGC TGGTAATCAA	5340
ATCGAAGGTC GCGTAGCTCA AGGTCAAAAA ATGGTAGTGG TTGAAGACCT TATTTCAACG	5400
GGTGGTTTCTG TTCTTGAAGC TGTAGCAGCA GCCAAGCGAG AAGGAGCAGA TGTACTTGGA	5460
GTTGTAGCGA TTTTCAGCTA CCAATTGCCA AAAGCAGATA AGAACTTTGC AGATGCTGGT	5520
GTTAAACTTG TGACGCTTTC AAATATAGC GAGCTTATCC ATCTAGCCCA AGAAGAAGGT	5580
TACATCACGC CAGAGGGCCT TGATCTTCTA AAACGCTTTA AAGAAGACCA AGAAAATTGG	5640
CAAGAAGGTT AGGTCAGTAA GATAAAGAGA GACGAGGCTA CCGAGTCTCT TTTACCATT	5700
TATTTAAAAT ATGACAG	5717

(2) INFORMATION FOR SEQ ID NO: 103:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 5558 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 103:

CCTGGACTTT CTAAAAATGAA ATCTTGCGAC CTGGATCAAG CCCTTCATGA GCATTTTCA	60
GAAGAAGAAT TAGCTGGTCA CTTCATGTC CTTCTATGGA CTTTTTTTAC AATGGCATTG	120
CTATCACACC CAATACCTAT CTAAGCGCCT GGTTCGTAAA CTTTATTGCA GCTCTTCCTC	180
TAAATTTTCT AATTGTTGAA CCAATTGCCC GTTTTATACT AAGTTCCTTT CAGAAACCAT	240
TTACTGGGGA AGAAGTTGAA GATTTTCAAG ATGATGATGA AATCCCAACT ATTATCTAAG	300
CCAGTTCTGT AAATFACTAA TATTTGAAAT CCACTTCCTT TTAGGGTGCA ATGGTTATAA	360
ATGAATTTTT GAGAGGATCA GAATGAAAAA ACTAGCAACC CTTCTTTTAC TGTCTACTGT	420
AGCCCTAGCT GGGTGTAGCA GCGTCCAACG CAGTCTGCGT GGTGATGATT ATGTTGATTC	480
CAGTCTTGCT GCTGAAGAAA GTTCCAAAGT AGCTGCCCAA TCTGCCAAGG AGTTAAACGA	540
TGCTTTAACA AACGAAAACG CCAATTTCCT ACAACTATCT AAGGAAGTTG CTGAAGATGA	600
AGCCGAAGTG ATTTTCCACA CAAGCCAAGG TGATATTTCG ATTAAGTCT TCCCTAAACT	660
CGCTCTCTA GCGGTTGAAA ATTTCTCTAC TCACGCCAAA GAAGGCTACT ATAACGGTAT	720
TACCTTCCAC CGTGTCATCG ATGGCTTTAT GGTCCAAACT GGAGATCCAA AAGGGGACGG	780
TACAGGTGGT CAGTCCATCT GGCATGACAA GGATAAGACT AAAGACAAAG GAACTGGTTT	840

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CAAGAACGAG ATTACTCCTT ATTTGTATAA CATCCGTGGT GCTCTTGCTA TGGCTAATAC	900
TGGTCAACCA AACACCAATG GCAGCCAGTT CTTTCATCAAC CAAAACCTCTA CAGATACCTC	960
TTCTAAACTC CCTACAAGCA AGTATCCACA GAAAAATTATT GAAGCCTACA AAGAAGGTGG	1020
AAACCCCTAGT CTAGATGGCA AACACCCAGT CTTTGGTCAA GTGATTGACG GTATGGATGT	1080
TGTGGATAAG ATTGCTAAGG CCGAAAAAGA TGAAAAAGAC AAGCCAACTA CTGCTATCAC	1140
AATCGACAGC ATCGAAGTGG TGAAAGACTA CGATTTTAAA TCTTAAAAAC CAAAAAATA	1200
CAGTATCCAC ATTCGGTACT GTATTTCTTT TACTCTCATT CTTAAGTTAA ATTATTAAAA	1260
TCCCATATTT GGTCTATCCA GCCTTCATAA AAGTCTGGCT CGTGGCAGAC CATAAGGATA	1320
GATCCCCAT ATTCCTTGAG AGCGCGTTTG AGCTCATCCT TTGCATCCAC ATCCAAATGG	1380
TTGGTCGGCT CGTCCAGCAC TAAACGTTG TTTTCACGAT TCATCAAGAG ACAGAAACGA	1440
ACCTTGGCTT GCTCTCCCC TGATAATACT TGAATCTGGC TTTCAATATG TTTGGTTGTC	1500
AAACCACAAC GGGCAAGGGC TGCACGGACT TCTGCTTGAT TAAGGGCAGG AAAGGCATTC	1560
CAGACAGCTT CAAGAGGAGT TTGGCGATTA CCGCCTTCTA CTTCTGCTC AAAATAACCA	1620
AGTCTAAAT AATCTCCACG CTCCACTTCC CCAGCGATTG GCGAGATAAT GCCCAAGAGA	1680
CTCTTCAAGA GAGTTGTTTT TCCAATACCA TTAGCACCAA TAATCGCAAC CTTTGTGATTG	1740
CGTTCGAAG TAAGATTTAA AGGCTTAGTA AGAGGACGGT CGTAACCAAT TTGCAAGTTC	1800
TTGGCTTGA AGATAAAGCG CCCTGGTGTA CGAGCTGGT TGAAATCAAA CGATGGTTTT	1860
GGTTTCTCAC TTTGGAGTTC GATAATATCC ATCTTATCCA ATTTCTTTTG ACGAGACATA	1920
GCCATATTAC GAGTTGCAAC ACGGGCTTTA TTACGAGCCA CAAAGTCCTT GAGGTCTGCA	1980
ATCTCTTTCT GCTGGCCTTC GTAGCTGCC TCTAGCTGAG ATTTCTTCAT AGCATAAACT	2040
TCTTGGAAC GGTAGTAGTC ACCAGAGTAA CGCGTCAGCT GTTGATTTTC CACATGATAG	2100
ACAATATTAA TAACGTCATT GAGGAATGGA ATATCGTGCG AAATGAGAAC AAAGGCATTC	2160
TCATAGTTTT GGAGATAGCG CTTGAGCCAA TCAATATGCT CAGCATCCAA GTAGTTGGTC	2220
GGCTCGTCCA ACAGCAAGAT ATCAGGCTTT TCAAGGAGAA GTTTTGCCAA AAGCACCTTG	2280
GTCTTTTGCC CACCTGACAA AGAAGTTACA TCCGTATCCA TGCCAAAGTC CATAACACCA	2340
AGAGCACGCG CTACTTCGTC AATCTTAGCA TCCAAGGTAT AGAAATCACG ACTCTCCAGA	2400
CGGTCTTGAA GTTCTCCTAC TTCTTCCATG AGAGCATCAA CATCCGCGCC GTCTTCAGCC	2460
ATTTTCATAT AGAGGTCATT GATACGAGCT TCAGCTTTGA AAAGCTCATC AAAAGCCGTA	2520
CGGAGAACAT CACGCACCGA CTGTCTTTCA GCAAGGACAG AGTGCTGATC CAAGTAACCA	2580

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GCCGTCACAT ATTTGGACCA CTCAACCTTT CCTTCATCTG GCAGCATTTT ACCAGTCACG	2640
ATACTCATAA AGGTTGATTT TCCTTCACCA TTGGCACCGA CCAGGCCGAT ATGTTCTCCC	2700
TTGAGGAGAC GGAAGGACAC ATCTTCAAAA ATTGCACGGT CACCAAAACC GTGACTCAGA	2760
TTTTTAACTT CTAAAATACT CATTTTAATT CCTTACCTTG TTTTATGTA ATCGTTTATA	2820
AAGGAGCCAA GCCAGATAGC CACCCAAAGT GTTGGTCCAC AAATCATCAA TCTCAAAGAC	2880
GCGATTGAAA TCAAAGAAAA AGTCCAAGAT TAATTGCGTA CACTCGATTTC CAAGACTCAC	2940
AAGAAAACTA AAAAGAAGGA CCTTTTGTGT TTTCCGCAA TTTGGAAATA GATAAAGGAG	3000
TTGGAAATC AGAGGAAAA ACAAGAAGAC ATTGAGGATA TTTGTAAAA AAATCCAACA	3060
TAATTGTCCA ATGTCACCTA CTTCGCCCAG TTTCCAGAGA GAATTGAAAG GAGTCAAAAG	3120
AAAAACCAGG CGTCCAAGAT GCTGAATACC TGGAGTTCCC ACTCCCACGG TAGATTGTTT	3180
TTGAGGAGTA AAGCAAAAC AGACAATGCA AATGCTATAG AAAATGACTC CCCAGACCAA	3240
AATATGATTA TAAGTCTTCT TCATCATTA GATTATTACCG CTGCCACTGC CTCTGGCGG	3300
TCACGTTTCA TTGTGTTAGA GCGCAATTGT CCACAAGCTG CGTCAATATC TGTACCATGC	3360
TCCTGACGAA CCACACAGTT GACCCCTTTT TTCTTAAGCG TATCATAGAA AGCCAACACG	3420
CACTCTTTGG GACTACGGCT ATATTGGTCA TGCTACTAA CTGGGTTATA AGGAATCAAG	3480
TTTACATAAG ACAATTTCTT GATGTTCTTG AGCAATTCAG TCAATTCCAA GGCTTGTCTT	3540
ACACCGTCGT TGACTTCATT AAGCATGATA TATTCAAAGG TTACACGACG GTTGTGTGTC	3600
TCAATGTAGT ATTCAATAGC AGCAAAGAGT TTTTCAATCG GAAAGGCACG GTTAATCTTC	3660
ATGATACTTG AACGAAGTTC ATTGTTAGGT GCGTGAAGAG ACACGGCAAG ATTGACCTGA	3720
ACCCCTTCAT CAGCAAAGTC ACGAATTTTA TGAGCCAAAC CTGAGGTGTA AACCGTGATG	3780
TGACGAGCAC CGATAGCCAT TCCTTTATCA TCATTGATAG TACGAAAGAA ATTCAAGACA	3840
TTGTTGTAAT TATCAAAGGG CTCACCGATT CCCATGACAA CGATATGGCT GATGCGTTCA	3900
TCCTGACCAC GCTCATCAA GTATTCTGA ACCAGCATGA TTTGCGCTAC GATTTCACCG	3960
TTATTGAGGT CACGTTGCTT CTTAATCAAA CCAGAGGCAC AGAAGGTACA ACCGATATTA	4020
CAGCCGACCT GAGTGGTCAC ACAGACAGAT AAACCATAGT GTTGACGCAT GAGTACAGTC	4080
TCAATTAACA TACCGTCGG CAATTCAAAG AGATATTTGA CTGTACCATC AGCAGACTCT	4140
TGCACAATAC GTTGTTCAA GGGATTGACC ACAAACCTGGT CATTGAGCTT AGCAATCAAA	4200
TCCTTGAAAA GGTGGTCAT TTCTTCAAAT GACTGCACAC GTTACCGTA GAGCCATTCC	4260
CAGATTTGAT CTGCACGAA TTTCTTTTCT CCCTGCTCCA ATACCCATTC CTGCATGGTT	4320
TGATGTACCA AACTATGAAT TGAGGGTTTC ATTTCTTCTC CTTATCTCT ACTCACTTCT	4380

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GACGAATGAC AAAATGACGT TGTCCCTTGT CGTCTTCTG ACGACGTCTA TTTTCTTAT	4440
CTGCATTCGA CTTTCGTTA GTTTGAGTCG GTTCTTTCC TTTCTAGAA GGTGTTTCTT	4500
CTTCCGTCTT ACGCATTTTC TTGTCAAATG ATGCTCGCTT AGGGGCTTCA TTTTCTAAGA	4560
CAAAATAGGC ACAACCATAA CTACAATACT CTAAAAGGTA GTCTTGTAAG CGACTGATT	4620
TTTCAAGTTT TTCTTCTGTT CGGTCATCCT TGTAAAAACC TCGTAGGCGA AGCTGTTCCG	4680
TGCTCCAGTC CCCCACGATA TAATCAAAC TGGTTAATAC TTCTGAAAA CGCTGATTAA	4740
AAGTCGTCAC ATCAAAGGCA TCCTTGATAT TTTCAACCA GAAAAAGCT ATCCCTTCCG	4800
TTTCGACCTT GTCCCCGTGT AAATGGAAC CCGGACCAGG AACTTGTTA TAGTTGTATA	4860
ATTCAGGTGC AATTTCTTTT CGCATAGATA TCCTTTTTTC ACGATTACTT AATACTTTAT	4920
TCTACCATAA TTTCTAGCAG TTAGCACGTT TCTCATAAAA ATGAAAAAG TCTGACGATT	4980
TTGTCAGACC AGAATCTTAT AACCTAAAA GAGAAGAACA ATTCTTCCCT CCAACTATCA	5040
TTATTTAGCA GCTGCCGTACA ATTCATCTAC TTTATPCCAG TTGATTACTG AAAAGAAAGC	5100
TTTGATGTAG TCAGGACGCA CGTTGCCGTA TTTCACGTAG TAAGCATGTT CCCAAACGTC	5160
CAAGCCCAAG ATTGGTTTTC TACCTTCTGA GATTGGTGTG TCTTGGTTTG CTGTTGAAGT	5220
CACTTCAAGT TTCCCTTCTT TGTTGACAAC CAACCATGCC CAACCTGAAC CAAAACGAGT	5280
TGTTGCTGCT GCAGTGAAGG CTGCTTGGA TTCTTCAAAT GAACCAAATG TTGCATCGAT	5340
TGCTGCTGCC AGTTCTGCTG AAGGAGCTGT TTTCTCGGGA GTCATCAATT CCCAGAAAA	5400
AGCGTGGTTC AAGTGTCGC CACCATTGTT GATAAGTGCT TGACGGATAT CAGCTGGGAT	5460
AGATTCTACA TCAGCAAGCA AGGCTTCAAG GTCTTCACCG ATTTCAGGGT GTTTTCTAA	5520
AGCTGCATTG GCATTGTTGA CATAAGTTTG ATGGTGT	5558

(2) INFORMATION FOR SEQ ID NO: 104:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 6735 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 104:

GGAATTGTAA ATATCATATT GTTTTGCAC CCAAATATCG TCGTCAAATC ATTTATGGCA	60
GATACAAAGC TAGTATCGGA AGAATCATAC GTGACTTATG TGAGCGTAAG GGTGTAATAA	120
TCCATGAAGC GAATGCTTGT TCAGACCATA TTCACATGCT TATCAGTATT CCTCCGAAAC	180

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TTAGTGTTC	GTCCTTTATG	GGCTATTTAA	AGGGCAAGAG	CAGTTTGATG	ATTTTGTATA	240
AGCATGCGAA	TTTAAATAC	AAATATGGCA	ATCGCAAGTT	TTGGTGTAGA	GGCTATTATG	300
TAGATACGGT	AGGCCGTAAT	CAGAAAGTGA	TAGCTGAATA	TATTCAGAAT	CAATTACAAG	360
AAGACAGAGT	AGCAGACCAG	CTCACGTTAT	TCGAGTCAGT	AGATCCGTTT	ACTGGCGAAA	420
TAAATAAGAG	GAAGTAACTA	AGGTGCTTTA	GCACCTGCTC	GGGAAAGTGG	TGCCCGAGGA	480
AGCTATTTCG	GTGGGCCTTT	GGCCCTGGCC	GGTAGAAGCG	GCTTATAGCC	GCAGAACAAA	540
CCACCAGTTC	ACACTGGTGG	TTTGTATTTA	AAAACTTGA	TACATAAAAA	TAAAAGTCTA	600
TATAAAGGAT	GGTAAATTC	CTGTTGTCCG	ATTTGGACAA	TATCCTAAAT	AGTTACAATA	660
TATGGTCTAT	ACTTTTTCTT	AGGAGAAAGC	TAGATGTACA	GACGTTTGAG	AGATTGAGG	720
GAGGATCATG	ATCTGCCCCA	AAAGCAAATA	GCTACAATAC	TTTCGTTTAC	AAATTCAGCT	780
TATGCCAAAA	TTGAACGGGG	TGAGCATGCG	TTGACGGCTG	ATGTATTGGT	TAAACTCTCA	840
GATTTCTATG	ACGTCAGTAC	AGACTATTTA	TTGGGATTAA	CTGATTTTCC	TGATAAAATT	900
CGCTTTAGAA	AATAATCTCC	TCAATTTTCAT	AGAGTTTGAA	AATGAGTGAG	ATTTTTTATT	960
TGCCCTTTGA	CAACTGAATA	GCCTAAAATG	GTACTTTCCT	CATTTGTGGA	GCAAATTTGA	1020
ATGGCTCGCC	ATGATAAGAG	CGATTTTAAA	ATCATCAATA	AAATAGAGCG	ATACTTTATA	1080
TGCCATGATA	CAAATGATAT	ACAATGATAC	TTCTGACCGT	TCAGCCTGCC	AACGTAAAAG	1140
AGCAGCAAGT	GAAATCTTTA	TGATGACTTC	ATCAGTCATG	CCACGTTGAA	TGTGTGAGTT	1200
TGTTAGATAA	ACGCAATTAA	TCCTCAAAAG	GTTCCCGGAA	CCTTTTGAGT	TCTACAGACG	1260
CATCACGTGG	AGTGTGTAAG	CTTGTTGCTA	AAAGCGTAAA	AACCTTGGA	CGAAAGGAAT	1320
AATAGACTTT	CTGCGAAACA	AAAATATAAT	ACAATAAAAC	TATGAATGAT	GAAGCAAGTA	1380
AACAATTGAG	CGATAGCCGT	TTCAAGATCC	TTGTAGGTGT	TCAGCGCACG	ACTTTTGAAG	1440
AGATGTTAGC	TGTGTTAAAA	ACAGCTTATC	AACGTAAACG	CGCAAAAGGT	GGACGAAAAA	1500
GCAAATTAAG	CCTAGACGAT	CTCCTTATGG	TAACTATTCA	ATACATGCCA	GAATAGAGCA	1560
CTTATGAACA	AATTGCGGCT	GATTTTGGCA	TTCACGAAAG	CAACTTAATC	CGTCGGAGTC	1620
AATGGGTGA	AGCAACTCTT	ATTCAAAATG	GTTTTACGAT	TTCAAATCT	GCCTTAATTC	1680
TGTAAAAACA	GTAATTCG	AAGGATTGTA	AGGTAAGAGT	TTTTTCTTT	CTGAAAAAAT	1740
GGTATAATAG	CAATCAAAAC	TAGAAAATAA	AACGGAATTT	GGAACAGATT	TGTCTGTATC	1800
CTAGTAGAGT	GGTGATACTA	TGAAGATTAG	TAAGAGGCAC	TTATTAAATT	ATTCCATCTT	1860
GATTCCCTAC	TTGCTTTTAT	CTATTTTGGG	CTTGATTGTG	GTCTATTCGA	CCACCAGTGC	1920
TATTTTAATT	GAAGAAGGCA	AGAGCGCCTT	GCAGTTGGTT	CGAAACCAAG	GAATCTTTTG	1980

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GATTGTTAGT TTGATACTGA TTGCCTTAAT TTATAAAITG AGACTAGATT TTTTGAGAAA	2040
TGAGCGACTA ATCATTITAG TTATATTAAT AGAAATGCTT TTATTGTTCT TGGCTCGTTT	2100
TATTGGTATT TCCGTAAACG GGGCATAACG TTGGATTTCG GTTGCAGGAA TAACTATTCA	2160
GCCAGCTGAG TACTTAAAA TCATTATTAT TTGGTATTTA GCTCACCAGT TCTCCAAACA	2220
GCAAGAAGAA ATAGCTACTT ATGATTTTCA AGTTTGTACT CAAAATCAAT GGCTTCCCCG	2280
TGCTTTTAAT GATTGGCGAT TCGTTCCTCT AGTCTGATT GGAAGTTTGG GAATTTTCCC	2340
TGATTTAGGA AATGCGACTA TTTTAGTCTT GGTTCCTTG ATTATGTATA CAGTTAGTGG	2400
AATCGCTTAT CGCTGGTTT CAACCATCTT GGCCTCTCGTA TCTGCCGCTT CTGTCCTTGT	2460
CTTGACCACT ATCAGCCTAA TCGGTCTTGA GACCTTTTCA AAAATTCCAG TATTCGGCTA	2520
TGTAGCCAAG CGCTTTAGTG CCTTTTTTAA TCCTTTTGCC GATCGTGCTG ATGCAGGTCA	2580
CCAGTTAGCT AATTCCTATT TTGCCATGGT CAATGGCGGT TGGTTTGGTC TAGGTCTTGG	2640
AAACTCGATT GAAAAACGAG GTTATTTGCC AGAAGCTCAT ACAGACTTTG TCTTTTCTAT	2700
CGTGATTGAA GAATTTGGCT TTGTTGGTGC CAGTCTTATT TTAGCTCTCT TGTTTTTCAT	2760
GATTTTGCGG ATTATCTTGG TCGGTATCCG AGCGGAGAAT CCTTTCAATG CCATGGTTGC	2820
ACTCGGTGTC GGAGGGATGA TGTGGTTCA GGTATTTGTC AATATCGGAG GGATTTCGGG	2880
CTTGATTCCA TCTACAGGAG TGACTTTCCC CTTCTTATCC CAGGGTGGAA ATAGTCTTCT	2940
AGTCTTATCA GTGGCAGTAG CCTTTGTCTT AAATATTGAT GCCAGTGAAA AACGCGCTAA	3000
ATTGTACCGA GAATTGAAA ATCAACCAAT GAACCTTCTG TTGAAGTAGG ATAAAGAAAG	3060
GATAGTTTAT GTCTCTTCAA AAATTAGAAA ATTATAGTAA TAAAAGTGT GTGCAAGAAG	3120
AAGTCTTGAT TCTAACAGAA TTACTGGAAG ATATTACTAA AAATATGCTT GCCCAGAGA	3180
CCTTTGAAAA AATAATACAG TTGAAAGAAT TATCAACGCA GGAAGATTAT CAAGGTCTAA	3240
ACCGTCTAGT GACTAGCTTA TCAAATGATG AAATGGTCTA TATTTACGC TATTTCTCTA	3300
TCTTGCCCTCT TTTGATTAAT ATTTAGAGG ATGTGGATT AGCTTATGAA ATCAATCATC	3360
AAAATAATAT TGATCAGGAC TATTTAGGTA AATTATCTAC AACGATTAA TTGGTAGCAG	3420
AAAACGAAAA TGCCGTGAG ATCCTAGAAC ACTTGAATGT TGTCCCTGTT TTGACAGCCC	3480
ATCCAACACA AGTGCAACGC AAAAGTATGT TGGATTTAAC AAATCATATT CATAGTCTTT	3540
TGCGTAAATA CCGTGATGTT AAGTTGGGGT TGATCAATAA AGATAAATGG TACAATGATT	3600
TGCGTCGTTA CATCGAAAT ATCATGCAGA CAGACATGAT TCGTGAGAAA AAATTAAAAG	3660
TGACTAACGA AATCAGCAAT GCTATGGAAT ATTATAACAG CTCCTTTTTC AAAGCTGTAC	3720

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CTCATTGAC GACGAGTAT AAGCGCTTAG CGCAAGCGCA TGGTCTGAAT TAAAAACAGG	3780
CTAAACCAAT CACCATGGGT ATGTGGATAG GTGGTGACCG TGATGGAAAT CCATTGTGTTA	3840
CAGCAAAGAC CTTGAAGCAG TCTGCACTCA CTCAGTGTGA AGTCATCATG AACTACTATG	3900
ATAAAAAGAT TTACCAACTT TATCGTGAAT TTTCTCTTTC AACTAGCATT GTCAACGTCA	3960
GCAAGCAAGT CAGAGAAATG GCTCGTCAAT CCAAGGATAA CTCGATTTAC CGCGAAAAAG	4020
AGCTTTACCG TCGTGCCTTG TTTGATATTC AATCAAAAAT TCAGGCAACT AAAACCTATC	4080
TGATTGAGGA TGAAGAAGTT GGGACTCGTT ATGAAACCGC CAATGATTTC TACAAGGATT	4140
TGATTGCCAT TCGAGATTCT CTA TAGAAA ATAAGGGCGA GTCCTTGATT TCAGGTGATT	4200
TTGTGGAATT ATTGCAGCA GTAGAGATAT TTGGTTTTPA CTTAGCATCA ATTGATATGC	4260
GACAAGACTC TAGCGTCTAT GAAGCCTGTG TGGCAGAACT CTTGAAATCA GCAGGAATTC	4320
ATTCTCGTTA TAGCGAGTTG AGCGAAGAAG AAAAGTGTGA CCTTCTCTTG AAAGAATTAG	4380
AAGAAGATCC CCGAATCTT TCTGCGACTC ACGCAGAAAA ATCAGAAATTA TIAGCAAAAG	4440
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TAAAAGAAGT AGGACTGGTG GATACGAAA GGGCGCGTGT TCAGATTGTT CCCCTTTTGTG	4620
AAACAATTGA AGACTTGGAT CATTCAGAGG AAACAATGAG AAAATATCTT TCTCTTAGCC	4680
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GTA CTGTCGG TCGTGGTGGT GGGCCAACCT ATGAAGCCAT TACATCTCAA CCGCTCAAGT	4920
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ACAAAGACGC CGCTTACTAT AACCTTGAAA TGCTAGTATC GGCAGCTATT AACCGTATGA	5040
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ATTATTTCTT CGAGTCAAGT CCAATCAAGG CTATTTCAAG TTTTAATATT GGTTCCTGTC	5220
CAGCCGCTCG TAAGACTATT ACTGAAATCG GTGGTTTGGC TGCCATCCCT TGGGTATTCT	5280
CATGGTCACA GAGTCGTGTT ATGTTCCCTG GATGGTACGG GGTGTTTCA AGCTTCAAGG	5340
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CTTCTCTCCA ATCGCTTCTT TCAAATGTTG ATATGGTTT GTCAAAATCA AATATGAATA	5460
TTGCTTTTGA ATATGCTAAA CTTTGTGAAG ACGAGCAAGT TAAGGCCATC TATGAGACTA	5520

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TTTAAATGA ATGGCAAGTT ACTAAGAACG TTATCTTGGC TATTGAAGGA CATGACGAAC	5580
TCTTAGCTGA CAATCCATAT CTAAAAGCTA GTCTGGATTA CCGTATGCCT TACTTTAATA	5640
TTCTCAACTA TATTCAGTTG GAGTTGATTA AACGCCAACG TCGTGGAGAA TTGTCCAGTG	5700
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TTAGAGAGTC TGTGGTAGCT GAAAACAGAT AAGTGGCAAT GATGAAAATT GGGCTGAATG	5940
CTATTTAGAA TTTGAAATTA TAAAAATTCG GTAAGCACAC CTTACAGTGC ATCTCGTTAT	6000
TGCGAGACTG AGCGATAGGG AAATTCCTTA TAATTGAGGT GGTACCGCGC ATCGACGTCC	6060
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GGCGTCGCTT GTTTAGATAA GTGAAATATG TTAAGGAAA TAAAAAGGAG AAACAGAATG	6180
AAAAATAACG GTTTAATTGG AATTATTGCT GCATTAGCAG TCTTAGTAGC AGGAAGCTTG	6240
ATTTATTCTT CAATGAATAA ATCAGAAGCT CAGAATAATA AGGATGAGAA GAAAAAACC	6300
AAGATTGGTG TGCTTCAATT TGTGAGCCAT CCATCCCTTG ATTTGATTTA TAAAGGGATC	6360
CAAGATGGAG TTGCAGAAGA AGGATATAAA GATGATCAAG TTAAATTTGA TTTTATGAAC	6420
TCAGAAGGTG ACCAAAGTAA GGTGCGACA ATGAGTAAAC AATTGGTTGC AAATGGGAAT	6480
GACCTTGTGG TTGGTATCGC AACACCAGCA GCCCAAGGGT TGGCTAGTGC AACAAAAGAC	6540
CTACCGGTTA TCATGGCCGC TATTACAGAC CCAATTGGTG CTAACCTGGT TAAAGATTG	6600
AAAAAACCAG GTGGCAACGT TACAGGGGTA TCTGACCACA ATCCAGCTCA ACAACAAGTT	6660
GAACTCATCA AGGCTCTGAC ACCGAATGTG AAAACAATCG GAGCTCTTTA CTCAAGTAGC	6720
GAAGACAATT CAAAA	6735

(2) INFORMATION FOR SEQ ID NO: 105:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 6516 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 105:

CTAGAGGATC CCAGCAGGTA AATTGGCTTC AGCTGGCAAA AAAGTTGCCC TCGTTGAACG	60
CAGCAAGGCT ATGTACGGTG GAACTTGTAT CAACATTGGT TGTATCCCAA CTAAACCTT	120

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GCTAGTTGCT GCTGAAAAGG ACTTGTCTTT TGAAGAAGTC ATTGCTACTA AAAACACGAT	180
CACTGGTTCGC CTCAACGGTA AAAACTATGC GACTGTTGCT GGTACAGGCG TAGATATCTT	240
TGATGCGGAA GCTCACTTCC TTTCAAATAA AGTCATCGAA ATCCAAGCTG GTGATGAAAA	300
GAAAGAACTG ACTGCTGAAA CAATCGTCAT CAACACTGGT GCTGTTTCAA ACGTCTTGCC	360
AATCCCTGGA CTGTCTACAA GCAAAAACAT CTTTGA CTCA ACAGGTATCC AAAGCTTGGA	420
CAAATTACCT GAAAAACTTG GAATCCTTGG TGGCGGAAAT ATCGGTCTTG AATTTGCCGG	480
CCTTTACAAC AAACCTTGAA GCAAGGTCAC AGTCCTAGAT GCCTTGGATA CATTCCTACC	540
TCGTGCAGAA CCTTCCATCG CAGCTCTTGC TAAACAATAC ATGGAAGAAG ATGGCATTGA	600
ATTGCTTCAA AATATCCATA CTACTGAAAT CAAAAACGAT GGTGACCAAG TGCTTGTCGT	660
AACTGAAGAC GAAACTTACC GTTTCGACGC CCTTCTCTAC GCAACTGGAC GCAAACCAAA	720
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AGTAGACAAA CACTGTCAA CAAACGTTCC TGGTGTCTTT GCAGTTGGAG ATGTCAACGG	840
TGGCCTTCAA TTTACTTACA TTTCACTTGA TGA CTTCCTG GTTGTTTACA GCTACCTTGC	900
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CGCTGTAAAG GAAATCCCCG TTGCAGCAAT GCCTCGTGGT CACGTAAATG GAGACCTTCG	1080
CGGTGCCTTC AAAGCTGTTG TCAATACTGA AACAAAAGAA ATTCTTGGAG CAAGCATCTT	1140
CTCAGAAGGT TCTCAAGAAA TCATCAACAT CATCACTGTT GCTATGGACA ACAAGATTCC	1200
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TTAAAACTA CTTTGGGCCT TCTTGCTGGG CGTTCTTCCC ACTTCGTTT AAGCCGTCTT	1440
GGACGTGGAA GTACGCTCCC AGGGAAGTC GCCCTTCAAT TTGATAAAGA TATTTTACAA	1500
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GGTGCCAACA TGATTACAGG GATTGCAACA ACCTTCCTAA CAGCCAAATC TTCTAAACT	1680
GGGAAAAATA TTGCCGTCCT CGAAATTGAC GAAGCCAGTC TATCTCGTAT CTGTGACTAT	1740
ATCCAGCCTA GTCTTTTGT CATTACTAAT ATCTCCGTG ACCAGATGGA CCGTTTCGGT	1800
GAAATCTATA CTACCTATAA CATGATATTG GATGCCATTC GGAAAGTCC AACTGCTACT	1860
GTCTCTCTTA ACGGAGACAG TCCACTTTTC TACAAGCCAA CTATTCCAA CCCTATAGAG	1920

TATTTTGGTT	TTGACTTGGA	AAAGGGACCA	GCCCAACTGG	CTCACTACAA	TACCGAAGGG	1980
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GGTGCCTATA	TCTGTGAAGG	TTGTGGATGT	AAACGTCCTG	ATCTCGACTA	TCGTTTGACA	2100
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ATCCAAATCG	GCGGGCTCTA	TAATATCTAT	AACGCCCTAG	CTGCTGTGGC	CATCGCCCGT	2220
TTCTTAGGTG	CCGATTCGCA	ACTCATCAAA	CAGGGATTTG	ACAAGAGCCG	TGCTGTCTTT	2280
GGACGCCAAG	AAACCTTTCA	TATCGGTGAC	AAGGAATGTA	CCCTTGTCCT	GATTAATAAT	2340
CCAGTCGGTG	CAACCCAAGC	TATCGAAATG	ATCAAACCTAG	CACCTTATCC	ATTTAGCCTA	2400
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GACTTTGAAC	AAATCACTGA	CATGGACATT	CCTGAAATCA	ACGCTGGCGG	TGTTCTGCAT	2520
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AGAAAGGAGA	TGAACTAATG	GTTTATACTT	CACCTTCCTC	AAAAGATGGC	AATTACCCCT	2760
ATCAGCTCAA	CATTGCCAC	CTCTACGGAA	ATCTCATGAA	TACTACGGGG	ACAATGGAAA	2820
CATCCTCATG	CTCAAGTATG	TGGCTGAAAA	ACTGGGAGCC	CATGTGACCG	TTGACATCGT	2880
TTCTCTCCAT	GATGACTTTG	ATCAAAATCA	CTACGACATC	GCCTTTTTTCG	GTGGTGGTCA	2940
AGACTTTGAA	CAAAGTATCA	TTGCAGACGA	CCTACCTGCT	AAAAAAGAGA	GCATTGACAA	3000
CTACATCCAA	AACGACGGTG	TAGTTCTGGC	TATCTGCGGT	GGTTTCCAAC	TATTGGGTCA	3060
ATATTATGTT	GAAGCTTCAG	GAAAACGTAT	CGAAGGGCTA	GGGGTCATGG	GACACTACAC	3120
GCTCAACCAG	ACCAATAACC	GTTTTATCGG	TGACATCAAG	ATTCACAATG	AAGATTTCGA	3180
TGAAACCTAC	TATGGATTTG	AAAATCACCA	AGGTCGTACC	TTCTCTCTCG	ATGACCAAAA	3240
ACCGCTGGGA	CAGGTGTCT	ATGGAAATGG	AAACAACGAA	GAAAAGGTCG	GTGAAGGGGT	3300
TCATTATAAG	AATGTCTTTG	GTTCTTACTT	CCACGGGCCT	ATCCTCTCTC	GTAATGCCAA	3360
TCTGGCTTAT	CGCCTAGTTA	CTACTGCCCT	CAAGAAGAAA	TATGGTCAGG	ACATCCAAC	3420
CCCTGCCTAT	GAGGACATTC	TCAGCCAAGA	AATCGCTGAA	GAGTACAGTG	ACGTCAAAAG	3480
CAAGGCTGAC	TTTTCTTAAA	CAAAGGAAAA	TGATATCAAA	GAATCCGTT	ATCTTGTCGG	3540
AGTTTTTTGT	CTTTTCTTTT	ACCCTTCTCC	CTTGCATTTT	CTCTCATTTT	TTGCCAAAAT	3600
AGAGGGGTAG	AAAGAAGGTA	GCATATGTCT	AAATTACAAC	AAATCCTAAC	ATATCTTGAA	3660

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TCAGAAAAAC TAGACGTCGC TGTCGTATCT GACCCCGTCA CAATCAATTA CCTCACTGGT	3720
TTTACAGTG ATCCCCATGA ACGCCAAATG TTCCTCTTTG TCCTAGCAGA TCAGGAACCT	3780
CTCCTCTTTG TCCCAGCTCT TGAAGTAGAA CGTGCAAGTA GCACCGTTTC CTTCCCAGTA	3840
GTGGGCTATG TCGATTCTGA AAATCCATGG CAAAAATCA AACATGCTCT TCCACAACCT	3900
GACTTCAAAC GTGTCGCTGT TGAGTTTGAC AATCTCATCT TGACCAAATA CCATGGTTTG	3960
AAAACAGTTT TTGAGACTGC TGAGTTTGAC AACCTCACTC CTCGTATCCA ACGCATGCGC	4020
CTCATCAAAT CAGCTGATGA AGTGCAAAAA ATGATGTTG CAGGTCTTTA TCCTGACAAG	4080
GCTGTTTCATG TTGGTTTTGA CAATATTTCT CTTGATAAGA CTGAGACAGA TATCATCGCA	4140
CAAAATCGACT TTGCCATGAA ACGTGAAGGT TATGAAATGA GCTTTGATAC CATGGTCTTG	4200
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ACAGTCGCTG TCGGCAAAAC AGACCAATTC AAGAAAGATA TTTACAACTT GACTCTTGAA	4380
GCCCAACAAG CTGCTCTTGA CTTTATCAAG CCAGGTGTGA CTGCTCATGA AGTGGACCGC	4440
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GATGAAACCC CAAGAAACAA CAATGGAAAT GATAATTGAT TAAGAAGTCA TCTATCAAAA	4920
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ATAGTATCAG GTATTGTGTA CTGACCCCAA ACAGTTAGAC AATTAATTTA TCCGAAGGAT	5040
TTAGTTCTGT ACTGCACAGG ACTAAGTCCT TTTAGTTTTA CCTTAATTCG TTTGTTGTTG	5100
TAGTAATCAA TATAGTCTAT AATGACTTGT TCCAATTGGT TAAGTGATTT AAATGTTTTC	5160
TCATAGCCAT AAAACATTTT GGATTTTAAA ATGCCAAAGA AAGATTCCAT CATACCGTTG	5220
TCTTGGCTGT TTCCCTTGCG TGACATAGAT GCTTGAATTC CCTTATTCTC TAGGAACCGA	5280
TGATAAGAAT CGTGTGGTA TTGCCAGCCT TGGTCACTAT GGAGAATCGT ATTCTCGTAG	5340
TGCTTCTCTT TGAATGCCTG TTCCAACATT GTTTGTACTT ATTCTAAATT AGGCGAACAA	5400
GAAAGATTAA AAGCAATAAT TTCGCTGTTA AAGCCATCTA AAAGTGGTGA TAAGTAAAGC	5460

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TTAGAGCCTT CAAATTGGGC TTGAATGAGA TTCTCTGCCT TCTTACCAAC GTCTCCCTTTA      5580
TGAGAAGAAT ATTTTCGTTT CTTTCGCATT TTAGCTTSTA AATTGAGTAC TTTCATCAAG      5640
CCTTGAAGTC TTTTATGATT TACCAGATAA CCACGATTTC TTAGTTCTAA ATGAACCCGG      5700
CGATAAGCAT AATTTCCCTT GTGTTTCGATA AAGATGGATT GAATTCAGT TTTAAGCTCT      5760
TGGTCTTTAT CTGTTTGTG TAGCTGTTTC AAGTGATAGT AGTAGGTCCA ACGAGCTAGT      5820
TTAATGGCTT CTAGAAGAAG ATCTAACGAA AACTCAGTCA TTAATTCTTG AACAATTTCT      5880
GTCTTTCTTC TTTCTCTTTT TCCTCCTTCA ATCGGAGTTC TCTTAACTTT TTTAGGATGG      5940
CATTCTCCGC TCTCAGGTAC TCTCCCTCTT GTTTCTCAA CAATAGTATA CCCGTTTTTT      6000
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ACTCTATCTT TAGTCCAGCC TTCATGTCAG ACTTTATTAA CCCCAATTAT TCACCCCAAA      6120
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TCAACTGTTA ACAGGTTATG GAACGGAATA TGCTTG      6516

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(2) INFORMATION FOR SEQ ID NO: 106:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 14654 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 106:

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ATCTTAGCT ATACTGTTTCG ATACTCCTC TTTTCACTTT CCTTTGTAGC AATTATTTT      180
CTGATTAATT TCGTGTATCC TGTAGATATG GTCATTAATT TGCCATTTTT GATTAACT      240
GGTTTGATTG TCTTGCTATC AGCTATCTCT TATATTAGTC TACTTGCTT CACAAAAGAT      300

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AGCATTTTCT ATGAATTTT AAACCATGTC CTAGCCTTAA AAAATAAATT TAAAAAATCA	360
TAGGAGTTTA AAATGAAACA ACTAACC GTT GAAGATGCCA AACAAATTGA ATTAGAAATT	420
TTGGATTATA TTGATACTCT CTGTAAAAAG CACAATATCA ACTATATTAT TAACTACGGT	480
ACTCTGATTG GGGCGGTTTCG ACATGAGGGC TTTATCCCTT GGGACGACGA TATTGATCTG	540
TCCATGCCTA GAGAAGACTA CCAACGATTT ATTAACATTT TTCAAAGGA AAAAAGCAAG	600
TATAAGCTCC TATCCTTAGA AACTGATAAG AACTACTTTA ACAACTTTAT CAAGATAACC	660
GACAGTACGA CTAATAATTAT TGATACTCGA AATACAAAA CCTATGAGTC TGGTATCTTT	720
ATCGATATTT TCCCTATAGA TCGCTTTGAT GATCCTAAGG TCATTGATAC TTGTTATAAA	780
CTGGAAAGCT TCAAAGTCT GTCTTTCAGT AACATAAAA ATATTGTCTA TAAGGATAGC	840
CTTTTAAAAAG ATTGGATACG AACAGCCTTC TGGTTACTCC TTCGACCGGT TTCTCCTCGT	900
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AAAACAATCG ATTTACCCTT TGAGAATTTA AGCCTTCCTG CACCTGAAA ATTTGATACT	1080
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TATGTTGCCT GTTCCCAAAA AATATGACCA ATTTTAAACC CAGATGTATG GCGATTATAT	1920
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AAACTGATTG AGGGGGATTA TACAACTAC TAAGATAGAG GTTATTCAAA AACATAATTT	2040
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783

ACCTTGATAT GATGCGTTTT ATAATTTTAA AGACTTTTTT CTATAGTAGA TTGAAATAAG	2160
ATGCGAACAA ATCAATTAGA AAATTCAAAT TAATTTATAG AAATATTTTA GTATTCCTGT	2220
GTA CTGTTCT AAATTCAGTC TGCTATATCT TATTTTCTA TTAAATCGC TTCTGTAACA	2280
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AAGGCTGCTG TCCCTTCTGT CGCAAGGATT CCATAACCAA TGT TTTGGAA ACGACGAGCC	2580
AAGTTCAAGG CTTCTTCTTT GGCATCATCA GCGATGGTAA AGACGACATT ACCAAAAGTT	2640
GGCAAGTGTA GATAAGAAGC TTCAAAGGCT TTATAGAGAG CTTTTTCCAA AGTAGCATCA	2700
GAACCCATAA CTTACCTGT TGA CTTCATT TCAGGACCGA GCAAGCTGTC TACCTTAGCT	2760
AGTTTGGTAA AGGAGAAGAC AGGTGCCTTG ATATGAACAC GGGTGCTTTC AGGCTAAAGT	2820
CCATTTTGGT AGCCAAGTTC TGATAAACTT TGACCAAGAA TGAGTTTGGT CGCTACTTGA	2880
GCCATAGGAA TAT TGGTTAC CTTAGATAGG AATGGAACAG TACGGCTGGC ACGTGGATTG	2940
ACCTCAATAA CGTAGACTTT TTCATCCTTG ATAACAACT GGATGTTTAT CATTCGAAGG	3000
CAGTGAAGAC CGAT TGTAA GCGTTTGGTG TAGTCTGCGA TGGTCTCCTG AACCTTTTGC	3060
GACAAGGTTT GTGGTGGGTA AACAGCCATT GAGTCACCTG AGTGGACACC AGCACGTTCG	3120
ATATGCTCCA TGATACCAGG AATGAGTACA TTTTACCAT CTGAAATGGC ATCAACTTCG	3180
CACTCTTGCC CAACGATATA AGAGTCGACA AGAACTGGGT GGTCTGGACT AGCCTTAACA	3240
GCAGTTCGCA TGTAAGAAGC AAGGTCTTCT TCGTTTTCAA CGATTTCCAT GGCACGTCCA	3300
CCAAGTACAT AAGATGGGCG GACAAGAACT GGAAGCCAA TCTTGCAGC TGCAAGAGCT	3360
GCTTCTTCTT CAT TGGTAGC CGTTTGTCTT GGTGGCTGTG GAATATCCAA TTCTTTGAGA	3420
GCTTGCTCGA AGAGGTCACG GTCTTCGGCA CGATCTAGGT CAGCAACCTG TGTACCAAGG	3480
ATGGTCACAC CTGCTTTTGC CAATGGCTCC GCAAGGTGA TGGCTGTTTG ACCACCGAAC	3540
TGAACGATAA CTCCTTTTGC TTGTTCCAAG TCAATGACGT TCATAACATC TTCGAATGTC	3600
AATGGCTCAA AGTAAAGCTT ATCTGATACA GAGAAGTCTG TTGAAACGGT CTCTGGGTTT	3660
GAGTTCATGA TGATAGCTTC ATAACCAGCT GCCTGGATAG CCTTAACAGA GTGAACGGTT	3720
GGTAGTCAA ACTCAACCCC TTGACCGATA CGGATTGGAC CTGAACCTAG GACAAGTACA	3780
GATTCTTTAT CAGATCTGAT AGATTTCATT TCCCAACCAT AGGTTGAATA GAAATATGGC	3840

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GTTTCGGAGT CGAACTCTGC CGCACAAGTG TCTACCATCT TATAAACTGG AACAATCTTG	3900
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CGGTCTGAAA AACCATTAAG TTTGGCTGTT TTCAAAACTT CTAAATCTTG TGGATGAGCA	4020
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TTTGTAAGCT CTGCAATTC TTCAGGTGTG TAGCCACGAC GAATGGCTTC TGATACGTAG	4140
AAGAGACGGT CATCTTGGGC TTGACAACC TTTTCAATCA AGGCATCATC AGAAACTGCT	4200
GCAAGTTCAG GTATTTCAAT GTGGTGCACC CCAATTTCAA GGGAGCGGCA GGCCTTGAGA	4260
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CCGAGACGGC GTTCAACCCTT TTCAAACTTG TCAAATGGGA AACGTGGAAT CTTAGCAACT	4380
ACGTAGTCAA GGGCTGGTTC AAACATGGCA TAGGTTGAAC CTGTAAGTGG GTTTATAACC	4440
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GCTTTAGAAG CAAGGGCTGA CGAACGTGAT ACACGAGGGT TTAAGTTCGAT AACATAATAC	4560
TTGAAGCTGT TAGGATCAAG AGCTAGCTGA ACATTACATC CACCTTCAAT CTTGAGGGCA	4620
CGAATAATGC TCAAGCTCGC ATCACGAAGC ATTTGGTTTT CATAGTCTGA CATGGTTTGC	4680
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GCCTGAGTCC CAGCGTAGTC AAATCAGCA GCCTGACCAA TAATAATCGG ACCAGAACCA	5400
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CTATTCGTCT CCTCTCAGG CGACATTAAA TAAGATACAA AGGACGAATA GAAAGCGATT	5640

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CCAGGAGCTG CATCTGGGTG GTATTGAACA GAGAAAGCAG GTTGGTATCT GTGGCGCACA	5880
CCTTCCACTG ACTTGTCATT GATTCTCTCG TGGGTAATAA TCAAGTGCTC TGGCAATCC	5940
TCGCGGCTGA CTGCATAACC ATGGTCTCTGG CTGGTGAAGT CTACTCGTCC TGTTCGAT	6000
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CAAGCGTTTC AAAATCTGCA TATTGGATTT GGCAACGCGT GAGTGGTCCA AGTCACCTGC	7320
AATAGCAACT TTAAGACCTT CAAAGTGGCC AAATTCCTCA TAAATGGTCA TCAAATCAAG	7380

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CAAGCTCTGG CTAGGGTGTT GGGCCGAACC ATCTCCACCA TTGATGATGG AAGTCGTAAT	7440
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ATCCACTCCT AAAGCAGACA GAGTCAAAAT GGTGTCATAA AGTGTCTCAC CCTTATTAAC	7560
CGAGCTAGTC TTCACATCAA AGTCAAGTCG TTCCAATCCA AGTTTAATCT CTGCGACTTC	7620
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CATGGCTACT CCTTTAACTT TCTAAGCTTC TTCAGTAATC AGAACTCTGT CTTGGTCATC	7860
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TGATAACATG ACCGCAACCA GGAGTTCAAA ATGATTGGTA AAATCAAGAC TAGGCTTGGC	9120
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TTTACTGCCTT TTTGAGCTTG GTATTCTTCC TCTGTCATGA TTTGCCAGTC ATTTCCTGAG	9300
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ACTGGATAAG ATTCAACTAA CTCAACTGGC TCCATACTGC GACTCGACGC AAGAACAATG	9540
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TTCTGGCATG TTAATAGAGT TTTTTTGACA TAGACTTTGG GCTCTACTAG GTAAAGTAGA	10440
GCTTTTGTGT ATGCACTATG AACATTCTAG AAAGGGAAAT CATATGATAA AAATCAATCA	10500
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AACGGCAGAC ACTATGTTC ACTTGCGACT GGTCAAACAC CGTAAAGAAG CGGAAACGCT	11100
AGTAGAGCAT TTAGACTATG ATAGCTATAG TGAGCAGAGA AAGGCTAATT TTGCCAAACA	11160
AAGTCAGCAA GCTGCTAACA ACCAAAGAGC CTACGATAAA ACCATGGAAG AACATCGGAG	11220
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ACCATTACCA GCTTCTAAG TCTTAGTCCA ACTGGAAAAA GAAAATTTGT CCATTGACGA	11460
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GGCATAGGAA TCTGAGCGAC CAGAGCCATA TCTTCCACTA CATGGTAGAG GTCTGGTGCC	12720

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GTTTGCTCAT CCACCTCACG CGCTCCATTC ATGGACATGA CAATCTCTGT CGATTGAAAA	12780
ATCATAGACA AAGCGTAGAT AAAGCCGATA ATCACTGCAA TAACCAAACC ACCAAGTCCA	12840
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TACATTGTAG TTGCTGACAA CACTGTTATA GAGTTGACGA GAGTAAGAAA TTTTATTTTC	13140
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CGAATAGAGA TCCGCGCTAT ATCACAGTGG TAGAAAAGAA AAAAGAAACA CCAAATAAAT	14280
ATCCACGTAA GGCTGGTATG CCAAATAAAC GCCCACTTTA AATTTTTTAG TAAACAAATG	14340
TTTACAAAT CAGCCTCGCT CTTTATTTC TAGGCTCGGG AAAAAATGAT TTACAAATC	14400
AGCCTCGCTC TTTTATTCT AGGCTCGGA AAAAATGATT TACAAAATCA TTTTCTCTG	14460

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CTATACTATC CTAAGCAAAG GTTTTTAATG TCATCCCGTG AGGTGACGAA GACGCAGAAA	14520
TATTTAAAAC TCTTTAAAT CTAAATTTTA AAGAAGTCTT ACTCTGAGGG CCTATTGCTG	14580
TAAAATAATG GGCTCTTTT TGATGCCCAA AAGTGAGGTT TATATGAAAC AAGAATCAAC	14640
TGTTGATTTG TTAC	14654

(2) INFORMATION FOR SEQ ID NO: 107:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 6405 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 107:

AGAAAAATCT GCTTTACAGA AAATAAAAT AATAGGAGAA AATCTATGTC AGATTGAAA	60
AAATACGAAG GTGTCATTCC AGCCTTCTAC GCATGTTATG ATGATCAAGG AGAAGTAAGC	120
CCAGAACGTA CGCGTGCCTT GGTCAATAC TTCATTGATA AAGGTGTTCA AGGTCTTTAT	180
GTCAATGGTT CTTCTGGTGA ATGTATCTAC CAAAGCGTTG AAGATCGCAA GTTGATTTTG	240
GAAGAAGTCA TGGCGGTAGC AAAGGTAAAT TGACCATTAT TGCCCATGTT GCTTGCAATA	300
ATACTAAAGA TAGTATGGAA CTTGCTCGCC ATGCTGAAAG CTTGGGAGTA GATGCTATTG	360
CAACGATTCC ACCAATTAT TTCCGCTTGC CAGAATACTC AGTTGCCAAA TACTGGAACG	420
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GGGTTGCTTT GACTCCAAGC CTTTACACAG AAATGTTGAA AAATCCTCGT GTTATCGGTG	540
TGAAGAACTC TTCTATGCCA GTTCAAGATA TCCAAACCTT TGTCAGCCTT GGTGGAGAAG	600
ACCATATCGT CTTTAATGGT CCTGATGAGC AGTTCCTAGG AGGACGCCCTC ATGGGGGCTA	660
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AATCTAAAAG GAGGTATTTA TGACATATTA CGTTGCAATT GATATCGGTG GAACCAACAT	1020
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GGCGCATAAG GGTGGACCTC ATATCTTACA AAAGACCAAA GATATCGTAG CTAGTTATTT	1140
AGAAAAAGGC CCAGTAGCAG GTGTTGCCAT ATCTTCTGCT GGGATGGTGG ATCCGGATAA	1200

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AGTGGTTATT CTTGGTGGTG GTATCATGGG GCAAGAGGCT ATCCTCAAAC CTAAGATCCG	1740
TACAGCCTTG AAAGAGGCTT TGGTACCAAG TTTAGCAGAA AAAACACGAT TAGAATTTGC	1800
CCATCACCAA AATACAGCAG GGATGTTGGG TGCATATTAT CATTTTAAGA CAAAACAATC	1860
CTAGTTTGGC TCAGCCAAAC TAGGATTTTC TTACACGTTT TTGTCTACGA TAGCCGTTGA	1920
GTTTTTTATT TTCCAGTAG CTATTAAAGA TTTTTPCCTT GCTTTCGCGA TTGATTTCGA	1980
AAAAGTAGGC ATAAATCAAA TCGATAAAGA AGAGCATAGG AAGTTGAGCG GATATTCGTT	2040
GGATATAGGA GGGTTGGCTG TGGTGGCTA CAAGAACAGT CTCTGTATAG GTCTGGCTAT	2100
CTTTATTGGG AACACTTGTA AAGAGTACAG TCTTTGCCCC CATCTCCTTA GCATCTAATA	2160
GACTATCTAA AATAGAAGGA GTTGAGCCTG AAAGTGAGAA GCCCAGTACT AGACAATTTT	2220
CATCCATGAT GCTGGTTGTC CAGGCAAAGC CGTCTGGTC TGTCAAAGCT TCGCAGACCA	2280
CACCTAGTCG CATAAAACGT AATTTCATTT CACGGGCGAC GAGGCCAGAA CTCCCTGTTT	2340
CAAAGAAGTA GATACGCTCA GCATCTTCGA TTAGCTGGGC AATTCGTCTT AGTTGGATTT	2400
CGTCAATCAA GTCTTGTTGTT TGTCCCTCA TATTGCTATA ACTTCTGAGG ACTCGTTTGG	2460
TCAGTGGACT GTGCTTGGAG ACTTGGTTGG CTTGATTTTC TGCCTGATGT TGGTATTGGA	2520
AAATAAATTC TCGGTAGCCA GTAAAGCCAC ACTTTTTCAG AAAGCGGGTC AAAGCAGCTT	2580
GAGAAATATG TAATTTTGG GTGACTTGTG GAGAAGATAA ATCATCTGTA ATCGTTTCAG	2640
CTTGCAAAAA ATAGCGAGCG ATTTCTTGTG CTAGGTCTGT CATTTCTTCA AAATGTGAAT	2700
CAATGATAGT TGCGATATCT GGTTCCTCA TAGGGAAAGC TCCTTTACAT GAGTCATACT	2760
GGAAGACTAG ATCAGAGAAT AGTCACACTT CATTATAACA CATAATATAA GGATAGATAA	2820
ATAAAAACGC ATCTCTGTTT TAAAAACGAA AAAATCGAAA AAGCTTCTCT CTTTTCATA	2880
ATTTTCTACT CAAATTGTGG TACAATTAAG AGTAAGATTT TAAGTTAGAA ATGAGACTGA	2940

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TTTGTATGAG AAAATTTAAC AGCCATTCTGA TTCCGATTCTG GCTTAATTTA TTGTTTTCAA	3000
TCGTCAITTT ACTCTTTATG ACCATTATTG GTCGTTTGT GTATATGCAG GTTTTGAACA	3060
AGGATTTTTC CGAAAAAAG CTAGCTTCAG CTAGTCAGAC CAAGATTACA AGCAGTTCAG	3120
CCCGTGGGGA AATTATGAT GCTAGTGGA AACCTTTGGT AGAAAAATACG TTAAAGCAGG	3180
TTGTTTCCTT TACGCGTAGC AATAAAATGA CGGCTACAGA CTTAAAAGAA ACAGCTAAAA	3240
AGTTACTGAC TTATGTGAGC ATCAGTTCTC CAAATTTGAC AGAACGCCAG CTGGCCGATT	3300
ACTATTTGGC TGATCCTGAA ATCTATAAAA AAATAGTGGA AGCTCTCCCA AGTGAGAAAC	3360
GCTTGGATTG AGATGGCAAT CGTCTATCCG AATCAGAACT GTATAACAAT GCGGTCGATA	3420
GTGTACAAAC GAGTCAACTA AACTATACAG AGGATGAAAA GAAAGAAATC TATCTTTTTC	3480
GTCAGTTAAA TGCTGTTGGA AACTTTGCGA CAGGAACCAT TGCGACAGAT CCTCTAAATG	3540
ATTCTCAGGT GGCTGTTATT GCCTCTATTT CAAAGGAGAT GCCTGGCATT AGTATTTCTA	3600
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AACGCTCGGT AAAAGAAATC CATCTGGATA AATATGGCAA TATGGAAAGC GTGGATACAA	3840
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GCGTGGATGC TTTACTGAAA AGTTATTTCA ATTCTGAGCT AGAAAAATGTT GGAGCCAAGT	3960
ATTCTGAAGG TGTCTATGCA GTCGCCCTTA ACCCAAAAAC AGGTGCGGTT TTGTCTATGT	4020
CAGGGATTAA ACATGACTTG AAAACGGGAG AGTTGACGCC TGATTCTCTG GGAACGGTAA	4080
CCAATGTCTT TGTTCAGGT TCGGTTGTCA AGGCGGCGAC CATCAGCTCA GGTGGGAAA	4140
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CTCCCATCAA TTCTTGGTAT ACTCAGGCTT ACGGTTTCATT CCCTATCACA GCGGTCCAAG	4260
CTCTGGAGTA TTCATCAAAT ACCTATATGG TCCAAACAGC CTTAGGTCIT ATGGGGCAAA	4320
CCTATCAACC CAATATGTTT GTCGGCACCA GCAATCTAGA GTCTGCTATG GAGAACTGC	4380
GTTCACCTT TGGCGAATAT GGCTTGGGTA CTGCGACAGG AATTGACCTA CCAGATGAAT	4440
CTACTGGATT TGTTCCTAAA GAGTATAGCT TTGCTAATTA CATTACTAAT GCCTTTGGGC	4500
AGTTTGATAA CTATACGCCG ATGCAGTTGG CTCAGTATGT AGCAACTATT GCAAATAATG	4560
GTGTTCTGTT GGCTCCTCGT ATTGTTGAAG GCATTTATGG TAATAATGAT AAGGGAGGAC	4620
TGGGTGACTT GATTCAGCAA CTGCAACCGA CAGAGATGAA TAAGGTCAAT ATATCCGACT	4680
CCGATATGAG CATCTGCAC CAAGGTTTTT ATCAGGTTGC CCATGGTACT AGTGGATTGA	4740

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CAACTGGACG TCCCTTTTCA AATGGTGCCT TGGTATCCAT TAGCGGAAAA ACAGGTACAG	4800
CCGAAAGCTA TGTGGCAGAT GGTCAGCAAG CAACCAATAC CAA'TGCGGTG GCCTATGCCC	4860
CATCTGATAA TCCCCAAATC GCTGTGCGAG TGGTCTTTCC TCATAATACC AATCTAACAA	4920
ATGGTGTAGG ACCTTCCATT GCGCGTGACA TTATCAATCT GTATCAAAAA TACCATCCAA	4980
TGAATTAGAA AGGAAATTAT GCTTTATCCA ACACCTATTG CCAAGTTGAT TGACAGTTAT	5040
TCTAAGTTAC CAGGTATCGG GATTAAGACG GCTACGCGTC TGGCCTTTTA TACGATTGGG	5100
ATGTCTGCTG ATGATGTCAA TGAATTTGCA AAAAATCTCC TTTCTGCTAA GAGAGAATTG	5160
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CCGACTCGTG ACCAGACAAC AATTTTAGTT CTTGAGGATA GTAGAGATGT GGCAGCCATG	5280
GAAAAATATCC AAGAATACCA TGGACTCTAT CATGTCCTTC ATGGCCTCAT TTCTCCTATG	5340
AATGGTATCA GTCCGGACGA TATCAATCTC AAGAGCCTTA TGA CTGCTCT TATGGATAGT	5400
GAGGTTTCAG AAGTGATTGT GGC GACTAAT GCTACAGCGG ATGGTGAAGC GACTTCCATG	5460
TATCTTTTCA GTTTGCTCAA GCCGGCTGGT ATCAAGGTTA CGCCTCTAGC ACGAGGTCTC	5520
GCTGTGGGAG CGGACATTGA GTATGCGGAC GAAGTGACAC TCTTACGAGC CATTGAAAAAT	5580
CGGACAGAGT TGTAAGTGTA GGCAAATTTA CGAACTCCAT TCATTTATAA AAAATCAAAG	5640
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AAGTTTAAAA AAACCAAGCA AATATGATAT ACTAAAGAGC GAGTATTCTA GTAGAATTAG	5760
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TCCCGGGCAA GAAGACCGTC TCATGACCAA TGAAACCATT GATTGGGATA AGAAAGTTGC	6000
ACCAAGTGCT ATCTACGAAG AAGGTGCAGT GGTCTTTCCA GTCCTTCACG GGCCAATGGG	6060
AGAAGATGGC TCTGTTCAAG GATTCTTGGA AGTTTGTAAA ATGCCTTACG TTGGTTGCAA	6120
CATTTTGTCA TCAAGTCTTG CCATGGATAA AATCACGACT AAGCGTGTTC TGGAATCTGC	6180
TGGTATTGCC CAAGTTCCTT ATGTGGCTAT CGTTGAAGGC GATGATGTGA CTGCTAAAAAT	6240
CGTGAAAGTG GAAGAAAAAT TGGCTTATCC AGTCTTCACT AAGCCGTCAA ACATGGGGTC	6300
TAGTGTGGT ATTTCTAAGT CTGAAAACCA AGAAGAACTC CGTCAAGCCT TAAAACTTGC	6360
CTTCCGATAT GACAGCCCTG TCTTGCTTGA GCAAGGAGTG AATGC	6405

(2) INFORMATION FOR SEQ ID NO: 108:

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- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 11309 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 108:

CGAGCTCGGG TACCGGGATT TTAAGGAGTT TGATATGTAT AACCTATTAT TAACCATTTT	60
ATTAGTATTA TCTGTTGTGA TTGTGATTGC AATTTTCATG CAACCAACCA AAAACCAATC	120
CAGCAATGTA TTTGATGCCA GTTCAGGTGA TTTGTTTGAA CGCAGTAAAG CTCGCGGTTT	180
TGAAGCTGTA ATGCAGCGTT TGACAGGGAT TTTAGTCTTT TTCTGGCTAG CCATTGCCTT	240
AGCATTGACG GTATTATCAA GTAGATAAGA AAATAATGGG CAGGACTAGG TCTTTGCCTC	300
TTTTTATTTT TAAAGGATGT TTGAGAAGGT TTTACAGTAA AAGAAAATTA AAAAATCTAG	360
AAAGAAAATA TGAAAGATAG AATAAAGAA TATTTACAAG ACAAGGGAAA GGTGACTGTT	420
AATGATTTGG CTCAGGCTTT GGGAAAAGAC AGTTCCAAGG ATTTTCGTGA GTTGATTAAA	480
ACCTTGTCCT TAATGGAAG AAAGCACCAA ATTCGTTTGG AAGAAGATGG TAGTCTGACA	540
TTAGAAATTA AGAAAAACA TGAGATTACC CTCAAGGGGA TTTTTCATGC CCATAAAAT	600
GGCTTTGGCT TTCTTAGTCT GGAAGCGAG GAGGACGACC TTTTGTAGG GAAAAATGAT	660
GTCAACTATG CTATTGATGG TGATACCGTC GAGGTAGTGA TTAAGAAAGT CGCTGACCGC	720
AATAAGGGAA CAGCAGCAGA AGCCAAATTT ATTGATATCC TAGAACACAG TTTGACAACA	780
GTGTGTCGGC AAATCGTTCT GGATCAGGAA AAACCTAAGT ATGCTGGCTA TATTCGTTCA	840
AAAAATCAGA AAATCAGTCA ACCGATTATG GTTAAGAAAC CAGCCCTAAA ATTAGAAGGA	900
ACAGAAGTTC TCAAAGTCTT TATCGATAAA TACCCAAGCA AGAAACATGA TTTCTTTGTC	960
GCGAGTGTTT TCGATGTAGT GGGACACTCA ACGGATGTCG GAATTGATGT TCTTGAGGTC	1020
TTGGAATCAA TGGACATTGT ATCCGAGTTT CCAGAAGCTG TTGTTAAGGA AGCAGAAAGT	1080
GTGCCGTATG CTCCGTCTCA AAAGGATATG GAAGGTCGTC TGGATCTAAG AGATGAAATT	1140
ACCTTTACCA TTGACGGTGC GGATGCCAAG GACTTGGACG ATGCAGTGCA TATCAAGGCT	1200
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CGAGTGGTGC CAATGCTTCC AGAACGACTA TCAAATGGCA TCTGCTCTCT CAATCCCCAA	1380
GTTGACCGCC TGACCCAGTC TGCTATTATG GAGATTGATA AACATGGTCG TGTGGTCAAC	1440
TATACCATTA CACAAACAGT TATCAAGACC AGTTTTCGTA TGACCTATAG CGATGTCAAT	1500

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GAACCTCATGG CCAAGCTTCA TGAACTTTA GAAACATGC GTGTGAAACG TGGAGCTCTC	1620
AATTTTGATA CCAATGAAGC GAAGATTTTA GTGGATAAAC AAGGTAGCC TGTGATATC	1680
GTCTTTCGGC AGCGTGGTAT TGCCGAGCGG ATGATTGAGT CTTTATGTT GATGGCTAAT	1740
GAAACAGTTG CCGAACATTT CAGCAAGTTG GATTTCCTT TTATCTATCG AATTCACGAG	1800
GAGCCTAAGG CTGAAAAGGT TCAGAAGTTT ATTGATTATG CTTCGAGTTT TGGCTTGCGC	1860
ATTTATGGAA CTGCCAGTGA GATTAGTCAG GAGGCACTTC AAGACATCAT GCGTGTGTT	1920
GAGGGAGAAC CTTATGCAGA TGTATTGTCC ATGATGCTTC TTCGCTCTAT GCAGCAGGCT	1980
CGTTATTCGG AGCACAATCA CGGCCACTAT GGAAGTAGCTG CTGACTATTA TACTCACTTT	2040
ACCACTCCAA TTCGTCGTTA TCCAGACCTT CTTGTTTACC GTATGATTTCG GGATTACGGC	2100
CGTTCTAAGG AAATAGCAGA GCATTTTGAA CAAGTGATTC CAGAGATTGC GACCCAGTCT	2160
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CGCGCCTTAC GAAGAGGGCA ATATCTGGAA CCAGGAACCA GAACGTCGTC GTAAACTCCT	2940
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AGTTCCCTT AAGGTCTATA TAAAAGATGG CTACGCTAAG CTTCTTTTAG GACTTGCCAA	3060
AGGGAAGCAT GACTATGACA AACGGGAGTC TATCAAACGT CGTGAGCAAA ATCGAGATAT	3120
CGCGCGTGTG ATGAAAGCTG TTAATCAGCG ATAAAAAGAG GAATTGAAAA TGGAAAAATT	3180
AGTTGCCTAT AAACGCATGC CTTTGTGGAA TAAACAAACA ATGCCTGAAG CTGTTACGCA	3240

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AAAGCACAAT AAAAAAGTTG GGAATTGGGG GAAAATTACT GTCTTGAAGG GAGCTCTCAA	3300
GTTTATTGAA TTGACAGAAG AAGGGGAAGT TCTAGCTGAA CACCTCTTTG AAGCAGGGGC	3360
AGACAATCCA ATGGCCCAAC CTCAAGCCTG GCACCGAGTG GAAGCTGCCA CAGATGATGT	3420
GGAATGGTAC TTGGAATTTT ATTGTAAACC TGAGGATTAT TTTGCTAAAA AATACAATAC	3480
CAATCCTGTT CATTCAGAGG TCCTAGAGGC CATGCAGACA GTGAAACAAG GGAAAGCTTT	3540
GGATTTGGGT TGTGGTCAGG GGCCTAATTC TCTTTTCTTA GCCCAGCAAG ATTTTGATGT	3600
GACGGCTGTA GATCAAAATG GACTAGCTCT TGAAATCTTG CAAAGCATTG TGGAGCAGGA	3660
AGATTTGGAC ATGCCTGTTG GCCTTTACGA TATCAATTCA GCTAGCATTG AACAAGAATA	3720
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TATTCAAAAT ATGCAGGAGA AAACCAAGTGT TGGTGGTTAC AACCTTATCG TTTGTGCCAT	3840
GGACACGGAG GATTATCCTT GCTCGGTAA CTTCCCATTC ACCTTTAAAG AAGGAGAACT	3900
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CCAGATTGAA CAAGACTTGA CTAGCTATTA TCAGCACTTT TATACCTATT ACCAAAAAAA	4980
TCCTCAAAAT GATTGGCAAA AGCTTTATCC ACCAGCCTTT TATCAGCAAT ATTTCTTGAA	5040

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TGAAAAGAT ACATGGGATC TATCAACGAT CTACCCAACT GACCAGGCTT GGAAGAAGC	5160
CTTAAAAGAT TTAACAGAAC AATTGGAGAC AGTAGCCCAG TATGAAGGCC ATCTCTTGGA	5220
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GAAGCTTTAC GCTTATGCTC ATATGAAGAA TGACCAGGAT ACACGTGAAG CTAAGTATCA	5340
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GTTTGAAGCC CTTGTTGAAA AATTAGGATT GGCATAAAAT GGTGAATCG TATAGTAAGA	6900
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ACCAAGCCTT CCAAAATATC TTTACCCAAT ATATCGGTGG TGGAGATTCA AGCTCAAGCA	8580

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TGGTCACTAT GGAGAATCGT ATTCTCGTAG TGCTTCTCTT TGAATGCCG TTCCAACATT	9060
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GCTGCTCAAA GAACAGCTTT GAGGTGTAG ATAAAACTTG TGAGGTCACC AACATATATA	9420
ATGTGAAGCT GACGTGGTTT GAATAGATTT TAGAAGAGTA TGAGTCTGGA AGTTTTAATG	9480
GATAATGCAA GATTCCATAG AATGGGTAAG CTAGAGTTCT TATGTGAAGA GTTTGGGCAT	9540
AAACTTTTAC CTTTTCCTCC CTACTCATCT TAGTATAGAA AAGTGAATCT GAAATAGTAC	9600
ATAACTGCTT CTA AACATT CTTATAAATT GATTAAATTT CTCAAATCAT ATTATTAGT	9660
TCTTATTTCA TTTTGTCTA CAATCCTGTT GAGAAGACAC GTGTTTATAT CAAAAAGTA	9720
TTGGCAAGTT GCAATACCTT TTTACGAGG TCTGTTGTCT TATTTTGTG TCAACTGACT	9780
ATATCTCCTA TGGTTCAGT TCAGAAGGCT AGGCTATAAT TATGATTGAT AAGAAGTATC	9840
ATTCCAAGTA TTGGGAGTGA ATGTTTCAAA ATCATGGGTT TCTATAATGG TCAGGCTGGC	9900
ATTTGCTAGA CCGCCATCTT TACGAAGAAG TGCTTCTTTA TAGCCTAGGA GAGTACGAAG	9960
ACTGGCAGTA AGATTGGCGC CGTGTCCGAC AATTAGAATA CGTTCAGCTG GACTATCTTT	10020
TAATGATTTG ATAAATTGGA TGGTCCGTTG AGTTGTACTA TAGAGGGATT CGGCTCCGAA	10080
CATTCGAGTG TCAAATTGAG CAAGATTGA ACGAAAAGCC TGGATTGTG GCGGGTAAAT	10140
AGCTTCCAAG GTTGCAATTT TCAAACCTTC TAACTTCCCA AGTTGCCATT CACGGAGATT	10200
AGGAACGATT TCTAAGAAC AGGGGTATA GAGTTGACTT TGGATAATCT CAGCAGATTT	10260
GACCGCTCGA GGTAATCAC TTGAATAAAT CTGATCAAAA GGAATTTCTT TGAGATACTG	10320

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ACCAAGTCGT TTTAGGGTTT CAATGGATTC AGGAAGAAGA GGAGAATCAC CACTAGCACC	10380
TTGAAAACGA CCTTCTTGGT TCCAGAGGGT ACGACCGTGG CGGACAAAGT AGAGTTTCAT	10440
TACTTGATGT CCTCCAAAAT ATCTACAAAG TCTGCCTTTA CAAAGCTAGC CAAGTCTTGT	10500
GGCGCGACGA TAATGCTGTG TCCGACTTCG CCTGCAGAGA CAATCATTTG ATCCAAATCT	10560
AGAGCAATTT TATCGATAAA AATGGGATAA TTGTGTTTCT GACGAATTCC GACAGGATTA	10620
TTGGCTCCAT GAATGTAACC AGTIGTTTTT TCTAAGTCCT TTTGTGGAAT CATGCTCACT	10680
TTTTTATTGC CAGAAATTTT AGCTAGTTTC TTTTCAGACA AGTGCTGAGT GATAGGGACA	10740
ATTCCGATAA TCGGTCCGGT CTTGTCTCCC AAAAGCGCCA AGGTTTTGAA AATCTGATCT	10800
CGTTCATAAC CTTGAGGAAG CTCTCCTTCT AGGGCATTGA TTTGAATCCC CTGATGAGGG	10860
ATAGCTGCTT TAGATAGGAT TTGTTCCACC AATGTTTTTT TCATTTTAAC TTTTTTTGCC	10920
ATTATTTATA TTTATCCTCC AATTGACTCA TCCAAATACC AAGCCAGATT CCCAGCGCAA	10980
AGAAGAAGGC GATGATGACA TAACCGACAA GTGAAAGTCC TGTGTATTGG ATACTTTCAG	11040
CGTTTCCTGC ATTTGGAATT AAGATCAAAA GGGTACTTGA TAGGACGATA CCGATGATGA	11100
AATGATAGAC GAACTGTTTA CGGAGTCTT CTAGTCTCC GTCCGTCCAA GCGTAGGCCA	11160
CTTCTCTCTT CTGCTCTTA CTTTGGACA TCTTGTAAG AGGTGGGAGG GCAATATAGA	11220
CATGACCTGC CTCGACTAGC GGACGCATGT AACGGTAGAA AAATGTCAAG AGCAAGGTCT	11280
GGATATGGGC ACCGTCGGTA TCCGCATCG	11309

(2) INFORMATION FOR SEQ ID NO: 109:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 5548 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 109:

CCATAGTCTA ACAAGTCTTT GTAAAGGTTT ATCCCTGATT CATGTAAAGA TTGTGTAAAG	60
AATCAAAAAA AGCCACTTTT GAAAAATGGC TGCTCCTAAA AATAGCTTTA AAAATTATTA	120
GTCTGTGCG AAAGATTGGT TAGGAAGAAA AATCGTGAAG CAACTGCCTC TGCCAAGCTG	180
ACTCGTCACC GTGACTTGGC CACCTAATAA TTGACTGAGT TCTTTGACAA TGGCAAGGCC	240
AAGACCAAGT CCACCAAGTT GTCTGCTTCG ACCTTTATTA ACTCGGTAAA AACGTTCAAA	300
AATACGATCC TGCTCTAATT GACTAATACC AATCCCTGTA TCTGATACAG AAATCTTAAT	360
GCCTTCGTTT ACCTTTTGGG TCTTGACCTC AATTTTCC CTTGTTTCAG TCTAACGGAT	420

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GCCATTGGAT AAAAGATTGA GTAAGATTG GGAAAGTAAT TGACTATCTG ATACGAGGGT	480
GACATCATCT GGCACCTGCA CCTTTAGCTG TAAATCCTTC TTCTTGAGCT GAGGTTGCAA	540
GCTTTGAGTC AAATCCTGTA CAAATTCTGC CAAAGAAAGG GTCGTCCATT GTATAGGCAT	600
TTGTTGAGCC TTAGATAAGG TAAGAAGATG CTCAACAATA TGCTCAAGAC GCAAACCTTC	660
TTTGTAATA ATGTCTAGAA AGTCATCCTT GAGCGCTTCT TCTTCAGCTG ACATCCCCTT	720
AATGGTTTCA GCAAAGCCCT TAATCGAAGT AACTGGTGTC CTCATTCAT GGGAGGCATT	780
TGAGACAAAG GCTAAATTTA ACTTTTCATA AGTTCTAATC GTTGTTAAAT CATATAGCAA	840
GACGAGCACA GCTTCCACAG ATTGGGTGGG GCTAAAAACG GGAAGTGTG TCACCTTCTAA	900
AATCAAGTCA CCCTCATGAA ACCCACTTAC TTCTTGTTTT AACCTTGTTT TTTGATCAAA	960
GGCTTGGTGA ACTAAATCC GAATATCCAT CCGTTTGAGG TCATCAAGTG AACTTATGTC	1020
GCCGTCCACA TCGGGAAAAT AATGAGGCAG AGAGCGACTG GATAATAACA TCTGACCTTG	1080
AGCGGAAACT AAAAACGTCC CCATGGTTAG GTGCGACAGA AGAACCTCCA TTGTTTCGGC	1140
TAGATCCTTG TATTGCTGAT CCTGTTGGGA GACTTTGGTT TTTAGGCCAG ACACATACTG	1200
AGCCAAAGAC TTAAAGTCTT CTTGCCCTTT TTCTAAAAAG TATTCACTAC TGGTCAAGAG	1260
AGGTTGGTGC AAGGTCTCAA AAGCAACTTC CCATTTCCAA AGGCCAAAAGA GCCAGTAGCC	1320
ACCTAGTCCC AAAGAAAGGG CTAGAAGAAA GAGACCGATG CCTTTACTGA TCCAAGTTAA	1380
TGCCATCCCT GCAATCAGAA TGAGGCTAAC ACTTAGATTG ACTAGCCAAA ATTGAAGGTA	1440
GCGTTTCATC TATAACTCCT TGAACCTATA ACCATAACCC CGAATGGTTC GAATAAATTG	1500
AGGGGCTTTA GGATTGCTCT CAATTTTTTC CCTCAACTTA CCAATATGAA CGTCCACCAA	1560
ACGTGTTTCC TGCCCAAAGT CATACCCCA GATACGTTCC AAAAGACGCT CTCTAGTCAG	1620
TGTCATGTTG GGATGTTTCA TAAGATAGAG CAAGAGTTCA AATTCTTTTG GGGTCAAAC	1680
CAGTAACTTA TTCGCCTTGT AGACTTCATG ACGCTCAGG TATACTTTCA AGGTCCCAA	1740
TAGCCAAGAA TCGTCAGCGA TATTATCTGA ATCATCTCCT TCTTGTTCTC CTTTAGTTCTG	1800
CCTGAGGACA GCCTTGACAC GCGCCAGCAA TTCTCTAGGG CTAAAAGGCT TGGTCAGGTA	1860
GTCATCAGCC CCTAATTCCA AGGCCAAAAC CTTATCAAAT TCATCACTTT TCGCAGAAAC	1920
CATCATAATT GGAGTTTGA CGCCTTTGGC TCTCAGCCGC TTACAAACTT CCATGCCATC	1980
TAAITGTGGT AACATGATAT CAAGCAAGAT AAAATCAAAG GGTTCGTGTT CTGCCAAAGC	2040
TAAGGCCTTC CGTCCATTG TCACCAATTG AGTAGAAAAG CCTTCCTTAC TTAAATGGTA	2100
GTCAAGCAAT TTCAGAATGT GTTCTTCATC ATCCACTAAT AAGACTTGTT TTGTCATCTA	2160

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TTATCTCCTA TTGGTAACAT TATAACACAA TTATCAGAAA TCCTAACATT GCTAAATCAG	2220
ATTAAATTTG CCTATCAAGA CTAGTATCTG GTCAAACGCT CAATCATCTC CTGTGTCTCT	2280
GGATAGGTCG CCAGTAGATC TACCCTTTCA AATAATTCAA AATCCTCAAA TTCAAAACCA	2340
GGAGCAACAA GACAAGAAAC CAGAGCATCA TCCTTATCAA CTGTTGATCC CCAAATAGTG	2400
CCCTTAGGAA CACAGTAGTG AAGTTGTTGC CCTTTGGATA TGTCCAGGCC TAAAGTGAAT	2460
GCTTCGTAGT GACCATCTGC TGTAAATCATG TGAACAGTAA GTGGGGATCC TGCATGAAAA	2520
TACCAGATTT CATCTGCTGT CAATCGGTGA AAATGTGAAG GATTGCTTTC TTCTAATAAG	2580
AAATAAATAC TGGTATAAAG CGCCCTTCCC TTACCAGCAA GGTTTATAGT GTCTGAAGCT	2640
TTTTTTGTTT GTCTAAAATA GCCACCTTCA ATATGGGGAG CTAATCTAG AGTTCTTATC	2700
AAGTCTTCTT TATCCGTCGG AGCCAATGGG TTGAAGTAAC TCTTGTTCAA AGTGGTTTAA	2760
CGATTTCAAG AACTCCTCTC AGTTCTGAGG ACACGGTAAT GATTGATGCG ACGGAAGTAC	2820
AAATCAATCG CCTTAAAAA AGAATTAGCG AATGATTCTG GTAAAAAAA TGCCACGCTA	2880
TGAAGGCTCA AGCGATTGTC ACAAGTCAAG GGAGAATTGT TTCTTTGGAT ATCGCTGTGA	2940
ACTATTGTCA TGATATGAAG TTGTTCAAAA TGAGTCGCAG AAATATCGGA CAAGCTGGTA	3000
AAATCTTGGC TGACAGTGGT TATCAAGGGC TCATGAAGAT ATATCCTCAA GCACAAACTC	3060
CACGTAATC CAGCAAACTC AAGCCACTAA CAGTTGAAGA TAAAGCCTAT AACCATGCGC	3120
TATCCAAGGA GAGAAGCAAG GTTGAGAACA TCTTTGCCAA AGTAAAAACG TTAAAAATGA	3180
TTTCAACAAC CTATCGAAAT CATCGTAAAC ACTTCGGATT ACCAATGAAT TTGATTGCTG	3240
GCATTATCAA TCATGAACCTA GGATTCTAGT TTTGCAGGAA GTCTATTATT TGGTTAGGTG	3300
AATTAGTGAA GCGTTTAGGC AAGTGCTCTT GGTACGACG TCATGGACTC TAAATCGATT	3360
ATATTTAGGG GTCATGACTA GTGAAGCAGT TAGCTAGTTC GCATATAAGC GGCTAGCGTC	3420
TAACAATTAG GAACTTTAGT TCCAATAACT TTAAGATTAC GACGTTTTAG GACATAAATC	3480
GATCATATTT ATGTCCTAAA ACTAGTGAAG CGCCTAGCCA AAGTCCGAAT AGGATTGGC	3540
GTTAGTTACT TAGATTGCTT TGCAATCAAG TAACTTTGGC GATTTACATC TTCTCTGGCG	3600
CTTCTACTCC AAGCAAGCGA AGGGCTTCTT TGAGAACGAC TCGGTTGCG TAGCTGAGGG	3660
CTAGACGGCT GTCGCGTTCT GGGCTTTCAT CCAAGATACG TGTATGTGCA TAGTATTTGT	3720
TAAAGGATTG AGCCAGGCTA ATTGCAAAT TAGCAATGAT AGAAGGTTCA AAGTTATCTG	3780
CCGCACGGTT GATAATACGT GGAAGTCTT GAATGAGTTT AATGATTTCC CAGCTTTCAG	3840
TATCATTCOA GCTATAGTTG CCAGCTGTTT CTGGTTTGAA ATCGGCTTTG CGTAAGATAG	3900
ATTGGATACG AGCGTAGGCA TATTGAACGT AAGTCCAGT TTCACCCTCG AAGGATACCA	3960

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TAGCCTCTAG GTCGAAGTCG TATCCATTTG TACGGTCGGT TTTGAGGTCA TAGAATTTAA	4020
TGGCTCCAAT CCCAACAGCA TGTGCTACTT GGTCTTTGTT TTCTAGTTCA GGATTTTATG	4080
CCTCGATTTG GACCTTGGCA CGGCTAACAG CCTCTGCAAC AGTAGGCTCT AGCAAGATGA	4140
CATTCCCTTT ACGAGTAGAG AGTTTCTTCC CTTCTTTTGT AACCAAACCA AAAGGAACGT	4200
GAGTAATGTC GTCACTCCAG TCGTAGCCCA TCTCTTGCAA GACAGCTTTG AGCTGTTTAA	4260
AGTGGGCAGA TTGTTCTTGA CCAACGACAT AGATAGATTT AGCAAATTGG TATTCTGTTT	4320
TACGGTAGAG GGCTGCAGCC AAGTCACGTG TGATATAGAG AGTTGCACCA TCAGACTTCT	4380
TGATGAGGGC TGGATGTTCA ATTCCATATT TCTCAAGATT CACAACTTGG GCACCTTCTG	4440
ATTCAAGAAG TAGTCCTTTT TCAGAAAGAA TGTCTACAAC TGCATCCATC TTATCATTTG	4500
AGAAGGCTTC TCCGTTATAG CTGTCAAATT CAACCTTCAA TTCATTGTAA AGGCGGTTAA	4560
ATTCCACTAA ACTTTCATCG CGGAACCATT GCCAAAGAGC GAGAGCTTCC TCATCTCCAT	4620
TTTCAAGTTT ACGGAACCAT TCGCGCGCTT CTTTCATCAA GCTAGGGTCA TTTTCAGCTT	4680
CAGCGTTGAT GCGGACATAG AGTTTAAGGA GTTCATCGAT TGGATGAGCT TTTACAGCTT	4740
CTTCGTCGCC CCATTTTTTG TAGGCAACAA TCAACATCCC AAATTGTTTA CCCCACTCTC	4800
CCAAATGGTT GACCTTGACC GTTTGATAAC CGATTTTTTG GAAAATATGT GACAAGCTAT	4860
CTCCGATAAC AGTTGAACGC AGGTGGCCAA TAGAAAATGG TTTAGCGATA TTCGGACTAG	4920
ACATGTCGAT AACAACATTT TCTTGTTTAC CAATATTTTG GTCAGCATAG TGTCTTTTTT	4980
CAGTGGTAAC AGCTTGCAAT ACTTGAGCAG AAATGGCAGA TTTATCAAGG AAAAAGTTAA	5040
CGTAAGGTCC TGTTCGACA ACTTTTCAA AGGCTTGGCT GTTCATTTTT TCAGCCAGTT	5100
CAGCCGCAAT CATTTGTGGT GCTTTACGTT CGACTTTTGC AAGAGAAAAA GCAGGGAAAG	5160
CAATGTCTCC CATTTCTGAG TTTTtagggg TTCCAGTAA CTTTAAAATA GCCTCTTGGT	5220
CCAGGCTATC AATGATGCTA GATAATTCGC TAGCAATCAA TTCTTTTGTA TTCATTAAGA	5280
GCTCCTTTTT GGACTTTTCT ACTATTTTAT CACAATTTTA AAGAAAGAAG AAAAAATTTT	5340
TGAAATCTCC TGTTTTTTTG GTATAATATG GTTATAAATA TAGTTATAAA TATGCACGCA	5400
AGAGGATTTT ATGAGAAAAA GAGATCCTCA TCACTTAATA AAAAAATGA TTAAGTGAAG	5460
GAAATTAAGT ACACAAAAAG AAATTCAAGA TCGGTTGGAG GCGCACAATG TTTGTGTGAC	5520
GCAGACAACC TTGTCTCGTG ATTTGCGG	5548

(2) INFORMATION FOR SEQ ID NO: 110:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 3132 base pairs

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(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 110:

TACCCGGTAG TCTTAGCAGA CACATCTAGC TCTGAAGATG CTTTAAACAT CTCTGATAAA	60
GAAAAAGTAG CAGAAAATAA AGAGAAACAT GAAAATATCC ATAGTGCTAT GGAAACTTCA	120
CAGGATTTTA AAGAGAAGAA AACAGCAGTC ATTAAGGAAA AAGAAGTTGT TAGTAAAAAT	180
CCTGTGATAG ACAATAACAC TAGCAATGAA GAAGCAAAAA TCAAAGAAGA AAATCCAAT	240
AAATCCCAAG GAGATTATAC GGACTCATTT GTGAATAAAA ACACAGAAAA TCCCAAAAAA	300
GAAGATAAAG TTGTCTATAT TGCTGAATTT AAAGATAAAG AATCTGGAGA AAAAGCAATC	360
AAGGAACAT CCAGTCTTAA GAATACAAAA GTTTTATATA CTTATGATAG AATTTTAAAC	420
GGTAGTGCCA TAGAAACAAC TCCAGATAAC TTGCACAAAA TTAACAAAAT AGAAGGTATT	480
TCATCGGTG AAAGGGCACA AAAAGTCCAA CCCATGATGA ATCATGCCAG AAAGGAAATT	540
GGAGTTGAGG AAGCTATTGA TTACCTAAAG TCTATCAATG CTCCGTTTGG GAAAAATTTT	600
GATGGTAGAG GTATGGTCAT TTCAAATATC GATACTGGAA CAGATTATAG ACATAAGGCT	660
ATGAGAATCG ATGATGATGC CAAAGCCTCA ATGAGATTTA AAAAGAAGA CTTAAAAGGC	720
ACTGATAAAA ATTATTGGTT GAGTGATAAA ATCCCTCATG CGTTCAATTA TTATAATGGT	780
GGCAAAATCA CTGTAGAAAA ATATGATGAT GGAAGGGATT ATTTGACCC ACATGGGATG	840
CATATTGCAG GGATTCTTGC TGGAAATGAT ACTGAACAAG ACATCAAAAA CTTAACGGC	900
ATAGATGGAA TTGCACCTAA TGCACAAATT TTCTCTTACA AAATGTATTC TGACGCAGGA	960
TCTGGGTTTG CGGGTGATGA AACAATGTTT CATGCTATTG AAGATTCTAT CAAACACAAC	1020
GTTGATGTTG TTTCCGTATC ATCTGGTTTT ACAGGAACAG GTCTTGTAGG TGAGAAATAT	1080
TGGCAAGCTA TTCGGGCATT AAGAAAAGCA GGCATTCCAA TGGTTGTCGC TACGGGTAAC	1140
TATGCGACTT CTGCTTCAAG TTCTTCATGG GATTTAGTAG CAAATAATCA TCTGAAAATG	1200
ACCGACACTG GAAATGTAAC ACGAACTGCA GCACATGAAG ATGCGATAGC GGTGCTTCT	1260
GCTAAAAATC AAACAGTTGA GTTTGATAAA GTTAACATAG GTGGAGAAAG TTTTAAATAC	1320
AGAAATATAG GGGCCTTTTT CGATAAGAGT AAAATCACAA CAAATGAAGA TGGAACAAAA	1380
GCTCCTAGTA AATTAAAATT TGTATATATA GGCAAGGGGC AAGACCAAGA TTTGATAGGT	1440
TTGGATCTTA GGGGCAAAAT TGCAGTAATG GATAGAATTT ATACAAAGGA TTTAAAAAAT	1500
GCTTTTAAAA AAGCTATGGA TAAGGGTGCA CGCGCCATTA TGGTTGTAAA TACTGTAAAT	1560

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TACTACAATA GAGATAATTG GACAGAGCTT CCAGCTATGG GATATGAAGC GGATGAAGGT	1620
ACTAAAAGTC AAGTGTTTTC AATTTCAGGA GATGATGGTG TAAAGCTATG GAACATGATT	1680
AATCCTGATA AAAAACTGA AGTCAAAAGA AATAATAAAG AAGATTTTAA AGATAAATTG	1740
GAGCAATACT ATCCAATGA TATGGAAAGT TTTAATTCCA ACAAACCGAA TGTAGGTGAC	1800
GAAAAAGAGA TTGACTTTAA GTTTCACCT GACACAGACA AAGAACTCTA TAAAGAAGAT	1860
ATCATCGTTC CAGCAGGATC TACATCTTGG GGGCCAAGAA TAGATTTACT TTTAAAACCC	1920
GATGTTTCAG CACCTGGTAA AAATATTAA TCCACGCTTA ATGTTATTAA TGGCAAATCA	1980
ACTTATGGCT ATATGTCAGG AACTAGTATG GCGACTCCAA TCGTGGCAGC TTCTACTGTT	2040
TTGATTAGAC CGAAATTAA GGAATGCTT GAAAGACCTG TATTGAAAAA TCTTAAGGGA	2100
GATGACAAAA TAGATCTTAC AAGTCTTACA AAAATTGCCC TACAAAATAC TGCGCGACCT	2160
ATGATGGATG CAACTTCTTG GAAAGAAAA AGTCAATACT TTGCATCACC TAGACAACAG	2220
GGAGCAGGCC TAATTAATGT GGCCAATGCT TTGAGAAATG AAGTTGTAGC AACTTTCAAA	2280
AACACTGATT CTAAAGGTTT GGTAACTCA TATGGTTCCA TTTCTCTTAA AGAAATAAAA	2340
GGTGATAAAA AATACTTTAC AATCAAGCTT CACAATACAT CAAACAGACC TTTGACTTTT	2400
AAAGTTTCAG CATCAGCGAT AACTACAGAT TCTCTAACTG ACAGATTAAA ACTTGATGAA	2460
ACATATAAAG ATGAAAAATC TCCAGATGGT AAGCAAATG TTCCAGAAAT TCACCCAGAA	2520
AAAGTCAAAG GAGCAAATAT CACATTTGAG CATGATACTT TCACTATAGG CGCAAATTCT	2580
AGCTTTGATT TGAATGCGGT TATAAATGTT GGAGAGGCCA AAAACAAAAA TAAATTTGTA	2640
GAATCATTTA TTCATTTTGA GTCAGTGGAA GCGATGGAAG CTCTAAACTC CAGCGGGAAG	2700
AAAATAAACT TCCAACCTTC TTTGTGATG CCTCTAATGG GATTTGCTGG GAATTGGAAC	2760
CACGAACCAA TCCTTGATAA ATGGGCTTGG GAAGAAGGGT CAAGATCAAA AACACTGGGA	2820
GGTTATGATG ATGATGGTAA ACCGAAAATT CCAGGAACCT TAAATAAGGG AATTGGTGGA	2880
GAACATGTA TAGATAAATT TAATCCAGCA GGAGTTATAC AAAATAGAAA AGATAAAAAT	2940
ACAACATCCC TGGATCAAAA TCCAGAATTA TTTGCTTTCA ATAACGAAGG GATCAACGCT	3000
CCATCATCAA GTGGTTCTAA GATTGCTAAC ATTTATCCTT TAGATTCAAA TGGAAATCCT	3060
CAAGATGCTC AACTTGAAAG AGGATTAAACA CCTTCTCCAC TTGTATTAAAG AAGTGCAGAA	3120
GAAGGATTGA TT	3132

(2) INFORMATION FOR SEQ ID NO: 111:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 14672 base pairs

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(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 111:

CGAGATTCTT TTAATGAAC TACGTGAAAT CTACCCATCA TCCAGATCTG GATATTCTCT	60
CCTATCTATA AGTAAAGTTT TAGGAGATTT TAATATAAGT TCTCATGCTT TTAAAGCTTC	120
GGTAAGAGAT TTAACCCGC TCAGTTTCCC ACTCATTTGC TTCTGGGAGA GTTCTCATTT	180
TATTATTCTT GAAAAATTA GTAAAAACAA GTTTTATATT TTAGATCCTG CAAAAGGCAG	240
GCAGAGAATG TCAATAAGTG AATTGAAAG GCATTATTCA AATATCATTT TAACATTTAA	300
AAAGTTAGAT AGCTTTATGT CTCGTAAAGA TAATAAGAAG TCGCCTGTTT TAAAGTATTT	360
TTTTAAGTAT AGGAATAAGC TAGGGATTTT ATTTTTTGTA ACAGCATTAT TGTATGTAAT	420
ACAATCATTA GTACCTATAG CTAATAGATA CATAATTGAC ACGAATTTCAG AGGACGATTC	480
GIATTCGTCT AGAATGTTAT TTAATATATT ATTTATATTT ACTGTTTCAT TCTCACTAAT	540
GTATTTATTA AGACAGATAT ATGTTGCATC CTAAATATAT ATAATGGATA AAGAGATTAG	600
CTATGATTTT ATGAAACATT TGATATATTT ACCTTACAGT TTTTATGAAA AACGTACTTT	660
AGGGGATATA CTTTTTAGAG CTAATCTAT TGTATATATA AGAGAAATAC TATCAAATAA	720
TTTTATAGCA GCTATACTTG ATTTGTTAAT GATTGTGGTT TATGCTGTGG TTTTATTTAG	780
CTTTTCTAAG TACATGTAA TCTTTTAAAT ATCACTAAGT CTAGCTCTAT CTATTGTAAT	840
GTATCCAATC ATAAAAATCT CAAAAATTT AATTGATAAA AATATAAAG AAAAGGTTAA	900
TGTTCAAAAT ATTACTTCCG AAGTAATTTT TAAAAATAGT GATATTAAAG TAACTGGAGA	960
AGAGGAATTT TGGATTAAAC AATGGGATAA TTTTAATACA AAACAGCTCA TCATAGGTCG	1020
AAAAGTTGAT ATACATTTAT CAATTGTTAG TAGTATAACG AATGTTTAC AAATTATTCT	1080
CCCTGTTTTG ACCCTTATTG TAGGTGTAAA TATAAAAACA TTCAACAAT TGACGTTAGG	1140
ACAAATTGTA GCAATAAGTA CAGTCTCACC ATACTTTATT TCTCCTATAA TTTCTTTAAG	1200
TGATAACTAT ATACAATTAA TGTATTTAAA GGGATATTTT TTAAGAATAG AGGATGTGTT	1260
TAATACTAAA TCCGAATTAA TTCCAGAAAG AGTCAGTCAA GATATAAAAT TTGATAAAAA	1320
AATAGAATTA AAAGATATTT GGTATAAATA TGGATTATTT GATGATTATG TTTTGAAAGG	1380
AATAAATGTT ACTATTAAAA AAGGAGAAAC TGTGCTATT GTTGAGAAAT CAGGTTTCAGG	1440
TAAGAGTACA TTAGCTAAAA TTTTATTAGG TTTATTAGAA CCTAATATTG GTTCAATAGA	1500
AGTTGATGGA GTAGAAAAAG AAGAAATTGG TCAAACATTG TATAGAAAGA TTTTGGAGC	1560

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AGTGTTACAA AATTCAACCC TAAGTTATGG TACCTTAAGA GAGAATTTGA CATTTGGACA	1620
CTTTGTTTCA GATGAAGAAT TAATGACAAA TCTAAATTCA ATTGGTCTTA GCAATGTAGT	1680
TAAATCTTTA CCTCTGGAT TAGAGACAAT CATCGCTGAA GAAGGTAATA ACTTTTCTGG	1740
AGGGCAGCAG CAAATGATAC TTTTAGCTCG TTGTCTTTTG TCGAAACCTT CGGTAGTTGT	1800
TTTGGACGAA GCAACAAGTA GTTTAGATAA TTTATCTCAA CAAATTACAA CTTCTTACTT	1860
AAGTGAAATC GGTACCACTA AGATTTTAAT TGCCCATCGA CTAGATACTA TCAAGTCTGC	1920
AGATAAGATC TTAGTAATGC ATAATGGTGA AATTGTAGAG ATTGGGACCC ATAGAGAACT	1980
TCTGAACTA GGAGGCATTT ATAAGCAATT GTATTCAAAT AATTAGTTTT TGATTAAAAG	2040
GGTAAATTTA TGAAGATTAT GAAAAAAAAA TATTGGACTT TAGCGATATT ATTCTTTTGT	2100
TTGTTCAATA ATTCTGTAC TGCTCAAGAA ATACCTAAAA ATCTTGATGG CAATATAACT	2160
CACACTCAGA CTAGCGAAAG TTTTCTGAA TCTGATGAAA AACAGGTTGA CTATTCTAAT	2220
AAAAATCAAG AAGAAGTAGA CCAAAATAAA TTTCGTATTC AAATCGATAA GACAGAATTA	2280
TTTGTAACAA CAGATAAACA TTTAGAAAAA AACTGTTGTA AATTGGAAT TGAACCACAA	2340
ATAAATAACG ATATTGTTAA CTCTGAAAGT AATAATTTAC TAGGCGAAGA TAATTTAGAT	2400
AATAAAATTA AGGAAATGT TTCTCATCTA GATAATAGAG GAGGAAATAT AGAGCATGAC	2460
AAAGATAACT TAGAATCGTC GATTGTAAGA AAATATGAAT GGGATATAGA TAAAGTTACT	2520
GGTGGAGCGG AAAGTTATAA ATTATATTCT AAAAGTAATT CTAAAGTTTC AATTGCTATT	2580
TTAGATTTCAG GAGTCGATTT ACAAATACT GGATTACTGA AAAATCTTTC AAATCACTCA	2640
AAAAACTATG TCCCCAATAA AGGATATTTA GGAAAAGAGG AGGGAGAGGA AGGAATAATA	2700
TCAGATATTC AAGATAGATT AGGTCATGGT ACGGCTGTTG TAGCTCAAAT TGTAGGGGAT	2760
GACAAATTA ATGGAGTAAA TCCTCACGTT AATATTAACG TCTATAGAAT ATTTGGTAAG	2820
TCGTCAGCTA GTCCAGATTG GATTGTAAAA GCAATTTTTC ATGCTGTAGA TGATGGCAAT	2880
GATATTATCA ATCTTAGTAC TGGACAATAT TTAATGATTG ATGGAGAATA TGAGGACGGA	2940
ACAAATGATT TTGAACATT TTTGAAGTAT AAAAAGGCTA TTGATTACGC GAATCAAAAA	3000
GGAGTAATTA TAGTAGCTGC ATTAGGGAAT GACTCCCTAA ATGTATCAAA TCAGTCAGAT	3060
TTATTGAAAC TTATTAGTTC ACGCAAAAAA GTAAGAAAAC CAGGATTAGT AGTTGATGTT	3120
CCAAGTTATT TCTCATCTAC AATTTGGGTC GGAGGCATAG ATCGCTTAGG TAATTTATCA	3180
GATTTTAGCA ATAAAGGGGA TTCTGATGCA ATATATGCGC CTGCAGGCTC AACATTATCT	3240
CTTTCAGAAT TAGGACTTAA TAACTTTATT AATGCAGAAA AATATAAAGA AGATTGGATT	3300

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GTTTCTGGTG CGATTGCAAT GATTATTGAT AAATACAAAT TAAAAGATCA GCCCTATAAT	3420
TATATGTTTG TAAAAAATT CTGGAAGAAA CATTACCAGT AAAAAATGGT ATAAAAAGTG	3480
TAAATATACC AAACGTATTG AGATATGATT TGAATATGTT ACAATTAGAA TATAAAAAATG	3540
AACAAAGTTG GGATAGTTTC ATAGATAATG TTAATTTAAT TGAGTTGGAA GAGAGAATTC	3600
AAACTACTAT TGGAATTAAA CAAATAAACA CACACAATAT TATTACTATT GCCCGAGAAG	3660
GGTACTCTCA AAATTATTTA CCTAACACTT CAGAAAATAC ATATAATTCA TTACAAGTCA	3720
GTTTAGTTGG AGTATTACTA CTTTTTATAA GTATGGTAAA TATTTTATGG GCTAAAAAAA	3780
GTAAATGAAA ATAAATTTG GAGCCCTCTG AAAAAGTAAG TCCTACAGTT CAACTAAAAT	3840
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TCGTTTTGTG TATAATACGA CCCCTATTTT TTACCAGCAG TTTTGTGAAAG ATCCAATCAT	4080
CATTGTTATA ACACCCCAAT CAACTGGTCC ACAGTCCATT TTGTTTTGGA TAGACGCAGT	4140
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CATTGAAAAT TGGGTCTCAG AAATGCAAAC AGGTTACCAC AACTACATCA CATTATTGGA	4260
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ATCTTGACCT AGATAAGCGC ATCTTTGAGT TATCGGGCGG AGAATCGCAA CGGGTGCCT	5040
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CGATGGATCA TCTGAAATAA AAATCCTTGT TTTTAATTGC ACGATGAGTT ACTGAAATAT	5280
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TTAATATTGA GGTAACTTT TCTTGATAAA GGAAGAAATA ATGGAGAGGA AGTTAGAATG	5400
AAAAAATTCG ACAATTATAT TATTGAGAAG CCTTGCGATT CTAATTCAGA TAAACTGCAA	5460
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CACCTTTAAA ACCAAAGAGC AATTTCTCGC TTAGCTGACT CTTCTGAATC TGAACCATGT	6240
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CTTCTCTTAC TGGAGGATTA AGGTATTCTT CTTCTGTTGAC AGCATGTGGT TCAAGGTTAC	6840

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TGACACGGAC TTTACGGATC ATTTGACGAA CCATTACCTC GATGTGTTTG TCACCGATTT	7200
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CACCTTCGCC AGTTTCACCC TTAACAAAGA CTTTCTTGGT ACGAGTTGAT GCATCTCTT	7440
CGATAGCAGT AACTTGTCCT TTAACCTCTG TAATAACCGC TTCCCTTTA GGATTGCGGG	7500
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CACCTGTGTG GAAGGTACGC ATTGTAAGCT GTGTACCAGG TTCCCGGATA GATTGGGCAG	7620
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CACCGTGAGT TGAGAAGAAC ATTTCCAATA CCGACAAACC TTCGCGGAAG TTTGAAAGGA	8100
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TATTTCCAAG GTTTTCTTTC TTGAATGGAG GGTTGAGCTC AAGATTGCTG ATAGCTTCCT	8580
TGATATCTCC ACCAAGTGGC AAGAAGTATT TAGCTGGAAC ACCTTCTGTC AAGTTGGCAT	8640

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CTGTTGCGAT ACCAACACGT GAGTGGAGGT GAACATAACC ATTGCGGTAA GCCATAACCG	8820
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GTCTGGTTT CAAGGTACGA TAATGATTG TTTCAGGTTT TTTGACTTCT CCATAAGACC	10320
ATGAACGGAC TTTACTTGGA GAAGCTAGGG TGATTGTCAT ACTTTAAAA CGATTTACAT	10380

812

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TTCTGTTGCT TCCGCTTTTG TTGCTTTCTC AGCTTCTTCA GCTTCAAAGG CTGCTTTAGC	10500
CTCTTGGGCT GCTTTTTCGC GGGCTTTTTC AAGGTCATCT ACGTGGATGA CATCTTCGTC	10560
CATTCCTTCA TCCAAGTCGC GAAGTTCAC TTCTTGGTCA TCTTCGTCTA GGACACGCAT	10620
GTCAAGACCA AGAGATTGCA ATTCTTTGAC AAGAACTCGG AAGGATTCTG GAACACCTGG	10680
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CCCAAGTGGG TTCAACATGA TGTCGACTGG AGTTCGGTCT GGAAGGTAAG GCATGTCTTC	11220
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AACGTCATG TAGTCAACAA TATTAGCTGG ATACTCTTGG TTGACCCCTT GGTGACGTCC	12240
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AGTATATTCA TCTTCTTCAT CAGCTGTCAA CCAAACAATT TCGTTCGTGA CAACACCTGT	12360
TTACCGGTCA ACCTTACGGT ATGGTGTGTTG AACAAAACCA TATTTGTTCA AGTGTCCATA	12420
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ACGACCATAG TGAGTGAGT GCACGTCACG TACTTCATAT CCAGCACGGT CACGAGTCAA	12540
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TTGGTCCATG AACTGTGACA ACTGTGATGA ACCAAGAAT TCTTTAACTG CAGCTGTTAC	12660
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ACGAGTCATA ATCGTACCAG CTTCTACCAA GATTCTCCA GTTTCAGGGT CTACCAATGG	13140
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ACGACCAACT GCTGCCAAGT CATAACGACG TGGGTCAAAG AAGCGAGCTA CAAGCAAGCT	13260
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AACCAATTCG CTGTCACCAA AGATATCAAA GATTTCATCA TCACCTGAGA AACCAAGAGC	13440
ACGAACCAAG GTTGTAAATG GAATCTTACG AGTACGGTCG ATACGAGTGT AGGTGATATC	13500
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GCCCACCTTA CCATTTTGTG CTACTTTGTC GTTAAAGTAA ACACCTGGTG AGCGGACCAA	13620
CTGAGAAACG ATAATACGTT CACCACCATT GATGATGAAA GTACCCATTT CTGTCATGAT	13680
TGGGAAATCA CCAAAGAAAA CTTCTTGGGT CTTGATTTG CTTGTTTCTT TATTGATCAA	13740
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CGTATATTTT GGTTCCTTGA TTTCATATCC AACAAATCC AACTCCATTG TGTCTGTGAA	13860
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GAATGAGTCA GTTTGAATTT CAATCAAATT TGGTAAGTCA AGAACTTCTT TGATTCTTGA	13980
AAAACCTACGA CGGGTACGAT GTTTCCCGTA TTGAACGTCA TGTCCTGCCA AGATGATTCT	14040
CCTTTGTAAA TAAGTTCCAA GCCTTGTCAA TCAGGCTTTT CTAATCGTCA TATGGTTGTA	14100
AACCCCTTAT CACCGTGTC TCTTGACGAA TTTTCAGAAT CTTTAAGCCT CTGTTACAAA	14160
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CCATATTATA CCTTATTTAG CTAGATTTTT CAAGGGGTTT CAGTAGGTTT TGGTAAATTT	14340
TTTTCCCATG GAAAACCTGG CATCACATTC GAATCACGCT ATGGTACAAA AAAC TGAAAA	14400
AACTATTGAC TGAAATCAT TTTCAAGGTA TAATAATAAA CGTTAAGGCG GTATAGCCAA	14460
GTGGTAAGGC ACGGCTCTGC AAAAGCTTGA TCGTCGGTTC AAATCCGTCT ACCGCCTTCT	14520
ATAACTTGAT TTATCAGGTT TCAAATGAAC AGAAAGCCCA ATTTGAAGGG CTTTTTTTAT	14580
TTTCCCTCGA ATAAATACGT ATAACTTTAA AAAC TTTTGG AGCGAGTTTG TGGCAGAGTT	14640
CTTTCCATGG CATAATTCCC TTTTGAAATC AG	14672

(2) INFORMATION FOR SEQ ID NO: 112:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 7902 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 112:

AGGAGACTAT TCAAGCCCAA ATTgAGTAGC CCAGCAAAGA CTGTATAGAC TGTGATACGT	60
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ATCGTACGAA AAGCGAAGAG AGAGGTCAAG ATGCCGCCTC CGATATATTT TTTACTACCG	180
TAAAGTAGGA TGGCATTGCG TCCTAAAACC ATGAGTCCAA AACTCAGTGG AATGATAAAG	240
AAGTTAAAGA TTCGACTACC TCTATTAACC AGAGAAACAT AGGCTTCTTT GTCTCCTTTC	300
CCCAGATAGT AACTGAGACG AGGCACATC ACTCCAATTG CACCTGTTAC AACCCAGCT	360
ATAACGGTCA CAATTCGCTG AGCTATGGTA TAGTAACTAA CGTTGACATC AATCCCTGTT	420
TTAACGAGGA AGAGGCGATC TAAAAAAGTG AAGAGCATAT TGGCATTGGC AAAGACTAAC	480
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ATGTCTCTTT TAATCCAAAA ATAAC TAATC AGGTAGTTAA TCAGCGTCGA TAAACTCATC	600
ACAAGTGAT AGACAACAAT ATCGTGTTC TTTTAAACA ATAAGAAAA AGAGACCAGC	660

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ATCAGGATAC	GGATGAAGGC	AGTTTTGTAA	AAGAGAAAAC	TGTAATTTTC	CAGAGCTTCA	720
TTGACCCATT	CGATTGAAAA	AATCTGGGCA	ATGAGTTGAA	TCCCCATAAC	AAGGTAGACC	780
TTTTTGACGA	TTGGATTATC	AGTAAAGAAG	AGAGGATAGG	CTAGGATATA	GACAGCAGTG	840
GTCAAAATCG	TACAAGCGAT	GCACAAATAA	AAAAGACTAG	AAAAGGTTCT	GTTAAGATCT	900
TTTTTGTTAT	CCTTGACATT	ACTGATAGCC	CTTAAACCGT	AGTTATAGAC	ACCATAAGTT	960
GCAAAGGGCA	AGAAAAATGA	CAAAATAGTG	TCGACTGAGT	TGAAGTAACC	ATAGTCAGTT	1020
CGGTCCAAGA	CACGCGCGAC	ATAGGTTCCA	GTTAGGATGG	GAAAAATAAT	ATTCAAGACA	1080
CGAATTCCCA	TGTAAGATAG	AGCATTTAAT	TTTATACTTT	TCATTCAATT	TACCTCGTTT	1140
TTCATTATAT	CATAAAGTTA	GCTAATAAGA	AATGAAGGGC	AGTAAGTCAA	GTAATCACTT	1200
TGAAGTTTCA	AATCTTAAGT	TTTAAGTTTT	CTTTAAGGAA	AGTATATTAT	TCTGAAGGAC	1260
TCTAAAATTT	CGCAGCCATT	TATTAGTAAT	TGCTACAGAA	TTCCTAGTCA	TTACTAGAAA	1320
TGGACTAGTT	TCTTTGAATA	ATAGAACTGC	ATAATTCCTC	TATTCTAGAA	GGGGAGGACC	1380
AGTATTTCCT	TTATGATAGG	ACTAGATTGT	GGTATAATAG	AGAGAATAAG	TTTTTTTAGT	1440
AAGACAAAGG	AGAAAATAGA	TGATTTATGC	AGGAATTCCT	GCCGGTGGAA	CTGGCACACG	1500
CATGGGGATC	AGTAACTTGC	CAAAACAATT	TTTAGAGCTA	GGTGATCGAC	CTATTTTGAT	1560
TCATACAATT	GAAAAATTIG	TCTTGAGGCC	AAGTATTGAA	AAAATTGTAG	TTGGTGTTCa	1620
TGGAGACTGG	GTTTCTCATG	CAGAAGATCT	TGTAGATAAA	TATCTTCCTC	TTTATAAGGA	1680
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TCGTCCATTT	ATTACACTTC	GCATGATTCA	GGACAATATC	CAACTTGCCC	AAAATCATGA	1860
CGCAGTGGAC	ACAGTGGTAG	AAGCGGTTGA	TACTATCGTT	GAAAGTACCA	ATGGTCAATT	1920
TATTACAGAT	ATTCCAAATC	GTGCTCACCT	TTATCAAGGA	CAAACACCTC	AAACATTCCG	1980
TTGCAAGGAC	TTCATGGACC	TTTATGGATC	TCTTTCTGAT	GAAGAGAAGG	AAATCTTGAC	2040
AGATGCATGT	AAAATCTTTG	TGATCAAAGG	AAAAGATGTG	GCTTTGGCCA	AAGGTGAATA	2100
CTCAAATCTG	AAGATTACAA	CCGTAACAGA	TTTGAAGATT	GCAAAAAGTA	TGATTGAGAA	2160
AGACTAGTAA	AATGATTAAT	CAAAATTTATC	AACTAACTAA	GCCTAAGTTT	ATCAATGTCA	2220
AATATCAGGA	AGAGGCTATT	GACCAAGAGA	ATCATATCCT	TATCCGTCCC	AACTACATGG	2280
CTGTCTGTCA	TGCGGATCAG	CGTTACTATC	AGGGAAAACG	TGATCCCAAG	ATTTTGAATA	2340
AAAAGCTTCC	AATGGCAATG	ATTCACGAGT	CATGTGGAAC	CGTCATTTCT	GACCCGACCG	2400

816

GAACCTACGA GGTGGTCAA AAAGTTGTCA TGATTCCCAA TCAGTCTCCT ATGCAGAGTG	2460
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GCTTTATGAG AGAGTTTGT TCTCTCCCTA AAGATCGTGT GGTGGCTTAT GATGCTATTG	2580
AAGATACGGT TGCAGCCATT ACAGAGTTTG TCAGTGTGGG CATGCACGCT ATGAATCGTC	2640
TATTGACTCT TGCTCATAGC AAGCGGGAGC GGATCGCCGT TATTGGAGAT GGAAGTTTAG	2700
CTTTTGTGGT TGCCAATATT ATCAACTATA CTTTGCCAGA AGCAGAGATT GTGGTTATTG	2760
GTCGTCAATTG GGAAAAGTTG GAACTCTTCT CATTTGCCAA AGAATGCTAT ATTACGGATA	2820
ATATTCCTGA AGATTTGGCC TTTGACCATG CTTTGAATG TTGTGGTGGT GATGGTACTG	2880
GACCAGCTAT TAATGACTTG ATTCGCTACA TTCGTCCTCA GGAACGATT CTCATGATGG	2940
GAGTTAGCGA ATATAAGTC AATCTCAATA CTCGCGATGC CTTAGAAAAG GGCTTGATTT	3000
TGGTTGGGTC ATCTCGTTCT GGTGCGATTG ATTTTGAAAA TGCTATCCAA ATGATGGAAG	3060
TCAAGAAATT TGCCAATCGT CTTAAAAATA TCCTTTATCT AGAAGAACCT GTAAGAGAAA	3120
TTAAAGATAT TCATCGTGTC TTTGCAACCG ATTTAAACAC AGCCTTTAAA ACAGTGTTTA	3180
AGTGGGAAGT ATAAGTACTG GAGGTTAATT GTGGAGAAAA TCATTAAAGA AAAAATTTCT	3240
TCCTTACTTA GTCAAGAAGA GGAAGTCCTC AGTGTGAAC AACTGGGTGG AATGACCAAT	3300
CAAACTATT TGGCCAAAAC AACAAATAAG CAATACATTG TTAAATCTTT TGGTAAAGGG	3360
ACAGAAAAGC TTATCAATCG ACAAGATGAA AAGTACAATC TTGAACTACT AAAGGATTTA	3420
GGCTTAGATG TAAAAAATTA TCTTTTGTAT ATTGAAGCTG GTATCAAAGT AAATGAGTAT	3480
ATCGAATCTG CGATTACGCT TGATTCAACG TCAATCAAGA CCAAGTTCGA CAAAATTACT	3540
CCAATATTAC AAATATTCA TACGTCGTCT AAGGAATTAA GAGGAGAATT TGCTCCTTTT	3600
GAAGAAATCA AAAAATACGA ATCCTTGATT GAAGAACAAA TTCCTTATGC CAACTATGAA	3660
TCTGTTAGAA ATGCAGTCTT CTCCTTAGAG AAAAGACTGG CTGACTTAGG TGTGACAGA	3720
AAATCTGTG ATATCGATTT GGTGCCTGAA AACTTTATCG AATCACCTCA AGGACGACTT	3780
TATTTGATTG ACTGGGAATA TTCATCAATG AATGATCCAA TGTGGGATTT GGCTGCCCTC	3840
TTTTTAGAGT CTGAATTCAC TTCCCAAGAG GAAGAAACTT TCTTATCTCA CTATGAGAGT	3900
GACCAAACAC CGGTTTCTCA TGAAAAGATT GCTATTTATA AAATTTTACA AGATACTATT	3960
TGGAGTCTAT GGACTGTCTA TAAGGAAGAG CAAGGTGAAG ATTTTGGTGA CTATGGTGTG	4020
AATCGTTACC AAAGAGCTAT TAAAGGTTTG GCTTCTTATG GAGGTTTACA TGAAAAGTAA	4080
AAACGGAGTT CCTTTTGGCC TTCTCTCAGG TATTTTCTGG GGCTTGGGTC TAACGGTTAG	4140
TGCTTATATC TTTTCGATTT TTACAGATTT GTCACCCTTT GTGGTGGCTG CAACTCATGA	4200

817

TTTTTTGAGC ATCTTTATCT TACTAGCTTT TCTCTTGGTA AAAGAAGGGA AAGTTCGCCT	4260
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TATCGGTATG CAGGCCAATC TTTATGCAGT TAAGTATATC GGAAGTTCTT TAGCTTCATC	4380
TGTATCGGCT ATTTACCCCTG CGATTTCAGT TCTATTGGCT TTCTTCTTTT TGAAGCACAA	4440
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CTATAAGGTT GAACAGGTTA ATTCTTTCTA CATTGGGATT CTTTGTGCTT TGGTTTGTGC	4560
TATTGCATGG GGAAGTGAGA GTGTTCTTAG CTCTTTTGCC ATGGAAGTG AATTGAGTGA	4620
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AGCATTTATG AGATCGATAG TGTCCAAGAC TATCGTAAAT TAGAAGAAAT TCTTAAAAAC	5640
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GCCGTAATCC AGCCGTTTTT ATGGAACGTT ATTTTCAGAT AGACGATGCG CATTGTGCGA	5940

818

AAGAGTTTCA AAAATTTCCA TCTTTCTCTA TTTTAGATGA CTGTTATCCT TGGGATTTGA	6000
GTGAAATATA TGATGCGCCT GTACTTTTAT TTTACAAGGG AAATCTTGAC CTCCTGAAAT	6060
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AAAAAGTCAT TCAAGGCTTG GAAAATGAAC TGGTTATTGT CAGTGGTCTG GCCAAGGGCA	6180
TTGACACAGC AGTCATATG GCAGCTCTTC AGAATGGCGG AAAAACCATT GCAGTGATTG	6240
GAACAGGACT GGATGTGTTT TATCCTAAAG CCAATAAAGC CTTGCAAGAC TACATCGGCA	6300
ATGACCATCT GGTCTAAGT GAATATGGAC CTGGTGAACA ACCTCTGAAA TTTCATTTTC	6360
CTGCCCCGTA TCGCATCATT GCTGGACTTT GTCGTGGTGT GATTGTAGCA GAGGCTAAGA	6420
TGCGTTCAGG TAGTCTCATT ACGTGTGAGC GAGCAATGGA AGAAGGACGC GATGTCTTTG	6480
CTATTCCTGG TAGCATTTTA GATGGACTAT CAGACGGTTG CCATCATTTG ATTCAAGAAG	6540
GAGCAAAATT GGTCAACAGT GGGCAAGATG TTCTTGCGGA ATTTGAATTT TAAAAATGAC	6600
CTAAGCTAGA ATTCTAAGAA AAAATCAATT TTAAGAGAAA ATGAACCCAA CATTTCCATA	6660
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CAAAGCAGTG CTTTGAGCAA CCTGTGGCTA GCTTCCTAGT TTGCGCTTTG ATTTTCATTG	6900
AGTATAAGGG AAAGTATAGT GAATTGAAAT AAGATGTGAA CAACTCTATC AGGAAAGTCA	6960
AATTAATTTA TAGAAATATT TTAGCAGCCA AGGTGTAATG TTATAGATTC AATTACACTA	7020
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ATTACAAGGC TTGTTTAAAG AAGAATTCAA AGACCTTGAC AAATAAAAAA AAAATGGTTA	7200
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AAAATGATAA AAAGAGCTCG TGAGATTGGC ATATCAGACT ACTAAAGTAT TGAGTTTCTT	7440
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AGCGATTTTA CTATGTGCCA TGCTTATCGC CTCTATCGGA TTAAATATGG ATTGACTCC	7620
CGTGATTTAT GGAGCCATGT TAATCTCTCC TTTGATGACA CCTATTCTGG GAGTGGGGCT	7680
CTCTCTAGCT ATATTTGATT TTAAATTGTT AAGAAAATCT TTTAAAATAT TAGCTATTCA	7740

819

AATTCTTGCC AGTCTAATAG CTTCAACACT TTATTTTAT CTTTCTCCCA TTTCGTATGC	7800
TAGTTCGGAG ATTGTTGCTA GAACCTCTCC GACTATTGG GATGTTCTCA TTGCTTTTCT	7860
AGGAGGGATA GCAGGTATCA TTGGTGCTAG GAAAAAGAG AC	7902

(2) INFORMATION FOR SEQ ID NO: 113:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 18627 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 113:

GAAGTTGAAA TGGCCAGCTG ATGAGCAATA TCGGTCATAG AAATCTTCTC AATCAACTTT	60
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TCAGCGACCA TCATTTTGA ACAGTGATAG CACTTGAAAC GACGCTTCT AAGTAGAATT	180
CTAGTAGGCA TACCAGTTGT CTAAGGTAA GGAATCTTAG ACGGTTTTTG AAAGTCATAT	240
TTCTTCAATT GGTTCGCCA CTCAGGGCAA GATGGGGCGT CGTAGTCCAG TTTGGCGATG	300
ATTCCTTGT GTGTATCTTT ATTGATGATG TCTAAATCT GGATATTAGG GTCITTAATG	360
TCTAGTAATT TTGTGATAAA ATGTAATTGT TCCATATGAA TCTTCTAAT GAGTTGTTTG	420
GTCGCTTTTC ATTATAGGTC ATATGGGACT TTTTCTTAC AATAAAATAG GCTCCATAAT	480
ATCTATAAGG GATTTACCCA CTACAAATAT TATAGAGCCA AAAATCCTTT GTTTACTAAA	540
CAAGGGATTT TTCTTTTGTC TCTGCTCCTT TTTTGATATA ATAGTTCTAT GTTAAATCA	600
GAAAAACAAT CACGTTATCA AATGTTAAAT GAAGAATTGT CCTTCCTATT GGAAGGCGAA	660
ACCAATGTTT TGGCTAATCT TTCCAACGCC AGTGCTCTCA TAAAATCAGG TTTTCTAAT	720
ACCGTATTTG CAGGCTTTTA TTTGTTGAT GGAAGGAAT TGGTTTTAGG CCCCTTCCAA	780
GGAGGTGTTT CCTGCATCCG TATTGCACTA GGCAAGGGTG TTTGTGGTGA GGCAGCTCAC	840
TTTCAGGAAA CTGTTATTGT TGGAGATGTG ACGACCTATC TCAACTATAT TTCTTGTGAT	900
AGTCTAGCTA AAAGTGAAAT TGTGGTGCCG ATCATGAAGA ATGGTCAGTT ACTTGAGTT	960
CTGGATCTGG ATTCTTCAGA GATTGAGGAT TACGATGCTA TGGATCGAGA TTATTTGGAA	1020
CAATTTGTCG CTATTTTGCT TGAAAAGACA GCATGGGACT TTACGATGTT TGAGGAAAAA	1080
TCTTAATGTA TCAAGCACTT TATCGAAAT ATAGAAGTCA AAATCTCTCC CAGTTAGTTG	1140
GTCAAGAAGT TGTGGCTAAG ACTCTTAAAC AAGCGGTGGA GCAAGAGAAA ATAAGTCACG	1200

820

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ATAAGGTTTA TATCATAGAT GAGGTTTACA TGCTGTCTAC AGGGGCTTTT AATGCCCTCC	1500
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ACAAGATTCC TGCTACTATT CTATCCCGTG TGCAACGTTT TGAGTTTAAA TCAATTAAGA	1620
CACAGGATAT TAAGGAACAT ATTCACTATA TCTTAGAAAA AGAAAATATC AGTTCTGAAC	1680
CAGAGGCTGT GGAAATCATT GCCAGACGGG CGGAAGGTGG AATGCGGGAC GCCTTGCTTA	1740
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CTCGTTTTGT GACCGATCTT TTGCACTATT TAAGAGACTT GTTAATTGTT CAAACAGGGG	1980
GAGCAAATAC TCATCATAGT TCAGTCTTTG TAGAAAAATT GGCATTTCCT CAAAAAATC	2040
TGTTTGAAAT GATTCGCTTA GCAACAGTGA GTTTAGCAGA TATTAAGTCT AGTTTGCAAC	2100
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TACTCTTTAG AAATTTCCGA GTCAGTTATG TGATGGGCAA AATCGTTGAT GTCATCGATC	2940
AGCATTTTAA TAGGAAAGAC TAGCCCTCAG CTTCCAGACA AAATCAAAGC CTTTATAGGCT	3000

821

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ATTAGAGATC AAAGATCTTC ACGTTGAGAT TGAAGGAAAA GAAATTTTAA AAGGGGTAA	3180
CCTGACCCCTG AAAACAGGAG AAATTGCCGC TATCATGGGA CCAAATGGTA CAGGTAAATC	3240
GACTCTTTCT GCCGCTATCA TGGGAAATCC AAACATGAA GTAACATAAG GTGAAGTTTT	3300
GTTTGATGGC GTAAACATCC TTGAGTTGGA AGTGGATGAG CGTGCGCGTA TGGGACTTTT	3360
CCTTGCTATG CAATACCCAT CAGAAATCCC TGAATTACC AATGCTGAGT TTCTTCGTGC	3420
CGCTATGAAT GCGGGTAAAG AAGATGATGA GAAGATTCA GTTCGTGAGT TTATTACTAA	3480
GCTAGATGAA AAAATGGAAT TGCTCAACAT GAAAGAAGAA ATGGCAGAGC GTTACCTCAA	3540
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GCCAACATTT GCTCTTTTGG ACGAGATTGA CTCAGGTCTT GATATTGACG CTCTTAAAGT	3660
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TGTTGTCCTT TCTGGTGGTC CAGAATTGGC TCGCGTTTG GAACGTGAAG GATACGCAAA	3840
ATTAGCTGAA GAACTTGGCT ACGACTACAA GGAAGAATTG TAATCCCTC GTATCTTTTA	3900
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822

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CCTTTACAAA AGAACTTCCA ATGGAATACG CAGTTGAGCT GAACCGCTTG ATTAGCTATG	8280

824

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AAAACAGTGT TTTGAGCAAC tGCGGCTAGC TTCTTAGTTT GTTCTTTGAT TTTGAGTATT	8460
AGATTTACTC AAAATCAAGG ATTTTGAAGA TGAACCTGTA TCAAAAAATC GCGGTTTAAA	8520
ATCGCGATTT TTTATAATTT CTCGTTAACA AAGCGGACAA ACTGATTCCA CCAAACCTTT	8580
AAGAAGAAGG CTTTTTCAAT TTTCTTGTCT GCTACCATTT CGAAACTAGG GCGCTCTGTG	8640
GTGATGTAAC CTTGACCAAT CAAGTCCTTG TCTTCATAAG TCAAATGGCC AACCCTGT	8700
CCAGCTTCAA GTGCTGCTGG GATTGCTTTG GAATCAGGTG TGAATTGAAC AGATTGGGAA	8760
GATTGATTCC CAACACGTTT GATTAGATAG ATATCCTCTG GAGCCACTGC AGTTACTGTA	8820
TCTTCTTTTC CATCTTGTAAC AGGGGCTTTG CTATCTTGAT AGGCATCGCC TTGTTGAACG	8880
ATTTTGCGAA GTGTAAATGT AGAAGAAATA TAATCCATTA GGGAAGATGT AGCTGTAAAT	8940
CGAGCGTAAG GATTATTGTC TTGATGATCT GCATTTTAAAA CAACTGTGAT GACTCTCATG	9000
CCTTTTTCGA CAGTAGTACC AACAAAAGAC TCTCCAGCCT TATCTGTTGT TCCTGTTTTT	9060
AGCCCATCAA AACCACCACG GTAAGCAGGC ATACCTTCTA ACATGTAGTT GGTGAAGTG	9120
ATTGTATCC CAGCAAAAGT AGAAGAAGT TTTTGGTGA TTTCTAAGAC TTGTGGGTAT	9180
TTTTTGATGA GGTGCGAGC AACGATAGCG ACATCATAAG CACTAAGCTT ATTTTCCTCA	9240
TCTTTTTTAG AACCTGGTA AATGTTATCC CCTAGAGTTT CATTTGTTAAG ACCTGTCGTA	9300
TTGACAACAG TGGCATCCTG AATTCCTCAT TCCAAGAGTT TTGCCCAGAT CATATCGACG	9360
AAATCTTTTT CTGAGCCAGC AATTTTCTCA GCTAGGGCAA TAGCGGCGCT GTTGGCACTA	9420
GATACCAGAG TTGCTTCAAG CAACTCTTCG ACAGTATAAT TACGGGCGCT CATAGGAATA	9480
TTACTGGCTT CAGAATTTGT CGTCAATTGA TAAGGATAAT CAGAAATATC TACAGGAGTG	9540
GAGAGGGTAA TACTTCCGTT TTCCAAAGCT TCATAGACCA GATAAACAGT AATCAATTTT	9600
GTTATGGAAG CAATTTGAC AGGTGCGTT GCATCCTTCT CATAGAGAAT TTTACCAGTA	9660
TTTGCCTCAA CAGCAATCGC ATGTTTAGCG GCAATGGTAA AATCTTGAGC AACAGCAGTA	9720
GAAGCACCCC CTAAAAGAGA GACAGTTAAC AAAGTTAAAA ATATTTTTTT CATAGTAGTC	9780
TTATTCTATC ATAAAGAAAA AAAATATTCT TGCTTTAATA ATTCATCTGT TAAGCTTTTT	9840
GAAAATATGG TAAAATAAAG TAAGGGAGGT AACTCATGTT TCGTAGAAAT AAATTATTTT	9900
TTTGGACCAC AGAAATTTTA CTCTTAACCA TCATCTTTTA CCTATGGAGA CAGATGGGGT	9960
CTTTGATTAA CCCTTTTGT AGCGTGCTTA ATACAATTAT GATTCCATTT TTATTAGGGG	10020
GCTTTTTTTA TTATTTGACA AACCTATTG TTACTTTCTT AAATAAAGTC TGTAACTCA	10080

825

ATCGTTTGCT	TGGTATTTTA	ATTACCTTGT	GTACTTTGGT	CTGGGGAATG	GTCATAGGTG	10140
TTGTCTATCT	CTTACCTATT	TTGATTAATC	AGTTATCTAG	TTTGATTATA	TCTAGTCAAA	10200
CTATTTATAG	TCGAGTACAA	GACTTAATCA	TAGACTTATC	TAATTATCCT	GCGCTCCAGA	10260
ATTTGGATGT	AGAAGCTACA	ATTTCAGCAGT	TAAACTTATC	CTATGTTGAT	ATTCTTCAAA	10320
ATATCCTAAA	TAGCGTATCA	AATAGTGTGG	GGAGCGTCTT	GTCAGCTCTT	ATCAGTACTG	10380
TTTTGATTTT	GATTATGACT	CCAGTTTTTT	TGGTTTATTT	CTTATTAGAT	GGACATAAAAT	10440
TCTTGCCCAT	GCTTGAAAGA	ACGATTCTAA	AGAGGGATCG	CTTGCAATAT	GCAGGCTTAT	10500
TAAAGAATTT	AAATGCGACG	ATTGCTCGCT	ATATTAGTGG	AGTTTCGATT	GACGCAATCA	10560
TTATAGGTTG	TTTGGCTTAT	ATTGGCTATA	GTATTATTGG	TTTAAATAT	GCTTTAGTTT	10620
TTGCCATTTT	TTCTGGTGTA	GCCAATTTAA	TTCCCTTATGT	GGGGCCAAGT	ATTGGTTTGA	10680
TTCCATATGAT	CATCGCAAAT	ATATTCACCTG	ATCCCATAG	ACTGCTGATT	GCAGTGATTT	10740
ATATGCTTGT	TGTTTCAGCAG	GATAGTGGCA	ATATCTTATA	TCCTCGAATC	GTAGGAAGTG	10800
TTATGAAGGT	TCATCCAATC	ACGATTTTAG	TTTACTTTT	GTTGTCAAGC	AATATCTATG	10860
GTGTAGTTGG	AATGATTGTC	GCAGTGCCAA	CCTATTCTAT	CTTGAAAGAA	ATTTCTAAGT	10920
TCTTATCCCA	TTTGTATGAA	AATCATAAAA	TAATGAAAGA	ACGAGAAAGA	GAATTAGCTA	10980
AGTAAAAGTC	AGGAGAACCC	TGATTTTCT	TTACTGGAAG	TGGCCTTTAG	ATTAGAAGAC	11040
TGAAAATAAG	TTAAAGTCTT	AACTAATTT	TCACAGCTAA	GAATAGTAGA	AGTTAATCTG	11100
ATAAAAATCG	AAAAAACCCAG	TGGAATTCTG	TGTCAGGGTA	AGTTCCTACTG	GTTTTCATAG	11160
TCTATTAAAG	TTCGAATGAA	ACCTATTTAT	AGTAGATTGA	AACTAGAATA	GTACACCTCT	11220
AATCTATAAA	CATTGTTAGA	AATCGATTTG	ACTGTCCTGA	TCTATTCGTT	CTATTCTTAT	11280
TTCATTTTAC	TATATTTTGG	TGCAATAAGT	GAAAAGTAGT	CCGAATAATA	TAAGGATTGA	11340
TTTATAGTTT	TTTAAACTCA	AATGAATTGA	AATAAAGAGA	GTACGAAAAT	TCTCATCTGA	11400
AAGTATTTTA	GAATAATTCT	CTTCGTGAAT	TTCTTCAAAA	CAGATAGCTT	CATCTTAGGT	11460
ATGTGATTTC	TTTTTGCATT	TTTGAGTTAG	ATAAGGTATA	ATGATTTTAT	TGTCTTTTTG	11520
GCTCGTTACG	GATTCGACAG	GCATTATGAG	GCATATTTTG	CGACTCGTGT	GGCGACGTAA	11580
ACGCTCAGTT	AAATATAACT	GCAAAAAATA	ACACTTCTTA	CGCTCTAGCT	GCCTAAAAAC	11640
CAGCAGGCGT	GACCCGATTT	GGATTGCTCG	TGTTCAATGA	CAGGTCTTAT	TATTAGCGAG	11700
ATACGATTAA	GCCTTGCTCA	GCGGTTTGAT	AAGAGATTGA	TAGACTCGCA	GTTTCTAGAC	11760
TTGAGTTATG	TGTCGAGGGG	CTGTTAAAAAT	AATACATAAC	CTATGGTTGT	AGACAAATAT	11820

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GTTCGACAGST GTTTGGACGT GGGTTCGACT CCCACCGGCT CCATTATTCC TTTGCATTCT	11880
TTTGCATTCC TTGGTAAAAC GTTGTTAAAT CAACGTTTTT TATTTTATC TTTGGTATTC	11940
CTTTGCATTC TTTTGCTAAA AAGGGAGTCA CAAACAGACC CTATTTTAAA AAAGGATAGA	12000
AAAAAGGATA CAACATTTGT CGCATCCTAA AAATAATCTT TTTTCGACGG AAGACATGGG	12060
ATTCGAACCC ACGCACGCTA TTACACGCCT ACCGCGTTTC CAACACGGCC TCTTAAGCCT	12120
CTTGAGTAAT CTCCAATAC TTAATCAAAT AGTCTACCAT AAAGGCTCTT ATCTTGCAAT	12180
AAAAATTCTA GAAATAAGAA AAATGATAGA TTTTGAAAGA AAATGATAAA AAATGCTTGA	12240
CTTCGAAAGA AAGTATGATA GAATGAATAG TGTAAACGAT AACAGGAGGT GATTCAGTGT	12300
TAAAACAGA ACGTAAACAA CTAATTTTAG AGGAGTTAAA TCAACATCAT GTAGTTTCTC	12360
TAGAAAAATT AGTTAGTTTG CTAGAAACGT CAGAATCAAC GGTTCGAAGA GACTTGGATG	12420
AGTTGGAAGC GGAAAACAAG CTTGTCGTG TGCATGGTGG AGCAGAACTC CCCTACTCCT	12480
TACAGGAAGA AGAAACCATT CAAGAAAAAT CTGTCAAAAA CCTTCAAGAA AAGAAATTGC	12540
TGGCTCAGAA AGCAGCCTCT CTCATTAAAG AAAAAGATGT CATCTTTATC GATGCTGGAA	12600
CAACAACATGC TTTTTTGATT CATGAATTGG TCAATAAGAA TGTACAGTT GTGACCAACT	12660
CCATTCACCA TGCCGCTCAG TTGGTTGAAA AGCAGAWTCC AACTGTCATG GTTGGAGGAA	12720
ACGTCAAGAC GGCCACAGAT GCTAGTATCG GGGGCGTTGC TCTTAACCAG ATTAACCAAT	12780
TGCACTTTGA CCGTGCCTTT ATCGGAATAA ATGGTGTGTA CGATGGCTAT TATACGACTC	12840
CTGATATGGA GGAGGGAGCT GTGAAAAGAG CTATTTTGA GAATGCCAAG CAGACCTACG	12900
TCTTGGTGGA TTCGTCAAAA ATTGGACAAA CTTGCTTTGC CAAGGTAGCC CCACTCAAAAC	12960
GCGTATCGT TATCACTAGT CAAGGGCATG AGCTCTTGCA GGTATTAAAG GAGAAAACGG	13020
AGGTAATAGA ACTATGATTT ATACAGTCAC ACTCAATCCA TCCATTGACT ATATCGTTTCG	13080
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TGGGAAAGGA ATCAATGTCA GCCGTGTCTT GAAACGTTTG AATATACCAA ATACAGCGAC	13200
GGGATTTATC GGTGGCTTTA CTGGTAAATT TATCACAGAT ACTTTAGCAG AGGAAGAAAT	13260
CGAGACACGT TTTGTCCAGG TGGCAGAAGA TACTCGTATC AATGTTAAAA TCAAAGCAGA	13320
CCAAGAAACA GAAATCAACG GAACGGGTCC AACTGTTGAA TCGGTTACAG TAGAAGAATT	13380
GAAAGCTATT TTATCTAGTC TGACAGCAGA AGATACAGTT GTCTTTGCAG GTTCAAGTGC	13440
TAAAAATCTA GGCAATGTTA TCTATAAGGA TTTGATTTCC TTGACGCGCC AGACTGGTGC	13500
GCAAGTGGTC TGTGACTTTG AAGGACAGAC CTTAATTGAT AGTTTGACT ACCAGCCTCT	13560
TCTTGTAATA CCAACAATC ATGAACCTGG AGCGATTTTT GGGGTTAAAC TCGAAAGTTT	13620

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AGATGAAATT GAGAAATACG CTCGTGAGTT ACTGGCTAAG GGTGCTCAAA ATGTTATTAT	13680
CTCTATGGCT GGTGATGGTG CCCTTCTTGT CACATCTGAG GGAGCTTACT TCGCTAAACC	13740
AATCAAAGGA ACAGTCAAAA ATTCAGTTGG AGCTGGTGAT TCTATGGTTG CTGGATTACAC	13800
AGGTGAATTT GTCAAATCAA AAGACGTAGT AGAAGCCTTC AAATGGGGAG TGGCTTGCGG	13860
AACGGCAACT ACCTTCTCAG ATGACTTGGC AACGGCGGAA TTTATTAAAG AAACATATGG	13920
AAAAGTTGAG GTAGAAAAAC GATGAAAATT CAAGACCTAT TGAGAAAAGA TGTCATGTTG	13980
CTAGATTTGC AGGCAACTGA AAAACAGCT GTCATCGACG AGATGATTAA AAATTTGACA	14040
GACCACGGTT ATGTAACAGA TTTTGAAACA TTTAAAGAAG GAATTTTGGC GCGTGAAGCT	14100
TTGACTTCTA CTGGTTTGGG TGATGGAATC GCAATGCCTC ACAGCAAAAA CGCTGCTGTC	14160
AAAGAAGCGA CAGTTCTATT TGCTAAGTCA AATAAGGGTG TTGACTACGA GAGCTTGGAT	14220
GGACAAGCAA CTGACCTCTT CTTCATGATT GCAGCTCCAG AAGGTGCCAA TGATACTCAC	14280
TTGGCAGCCT TGGCAGAATT GTCTCAATAC TTGATGAAAG ACGGTTTTGC AGACAAACTT	14340
CGTCAAGCAA CATCTGCAGA CCAAGTTATC GAACTTTTTG ACCAAGCTTC AGAAAAAACT	14400
GAGGAACCTG TTCAAGCACC TGCTAATGAC TCTGGTGACT TTATCGTAGC TGTTACAGCT	14460
TGTACAACAG GTATTGCCCA CACTTACATG GCCCAAGAAG CCCTTCAAAA AGTAGCTGCT	14520
GAAATGGGGG TTGGTATCAA GGTGCGAAACC AACGGTGCTA GCGGTGTTGG AAATCAACTA	14580
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CACTTGATGA GTGGTGATC TCAAATGTTA CCATTCGTTA TCGGTGGTGG TATCATGATT	14880
GCCCTTGCCT TCTTGATTGA CGGTGCTTTG GGTGTTCCAA ATGAAAACCT TGGCAATCTT	14940
GGTTCTTACC ATGAGTTAGC TTCTATGTTT ATGAAAATTG GTGGAGCTGC CTTTGGTTTG	15000
ATGCTTCCAG TCTTTGCGGG TTATGTTGCC TACTCTATTG CTGAAAAACC GGGTTTGGA	15060
GCAGGTTTCG TGGCTGGTGC TATTGCCAAA GAAGGTTTTG CCTTTGGTAA AATTCCTTAT	15120
GCCGCAGGTG GTGAAGCAAC TTCAACTCTT GCAGGTGTCT CATCTGGTTT CCTAGGTGCC	15180
CTTGTGGTG GATTATCGC AGGTGCCTTG GTTCTTGCCA TCAAGAAATA CGTTAAAGTT	15240
CCTCGTTCAC TCGAAGGTGC TAAATCAATC CTTCTATTGC CACTTCTTGG AACAATCTTG	15300
ACAGGATTTG TTATGCTAGC TGTAATATC CCAATGGCTG CAATCAACAC TGCTATGAAT	15360

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GACTTCCTAG GCGGTCTTGG AGGAGGTTCA GCTGTCCCTC TTGGTATCGT CCTTGGTGGA	15420
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ACGCTTGCAG CAACTGTTTC TTCAGGTGGT TCTGTAGCCA TGGCAGCAGT TATGGCTGGA	15540
GGAATGGTGC CACCACTTGC AATCTTTGTC GCAACTCTTC TTTTCAAAGA TAAATTTACT	15600
AAGGAAGAAC GTAACCTCTG TTTGACAAAC ATCATCATGG GCTTGTCTAT TATCACTGAG	15660
GGAGCGATTC CATTTGGTGC CGCTGACCCA GCTCGTGCGA TTCCAAGCTT CATCCTTGGT	15720
TCAGCAGTAG CAGGTGGACT CGTTGGTCTT ACTGGTATCA AACTCATGGC GCCACACGGA	15780
GGAATCTTCG TTATCGCCCT TACTTCAAAT GCTCTCCTTT ACCTCGTTTC TGTCTTGGTA	15840
GGAGCAATCG TAAGTGGTGT GGTATTATGGT TACCTACGCA AACCACAAGC ATAAAAAATA	15900
GAAAAATGAA AAGATTGCAC CGTTTGGTGC AGTCTTTTTC TCTTCCCGAA ATGCCTGTGA	15960
AATATGGTAT AATAGAAGAA TGGCAAACAA GAATACAAGT ACAACAAGAC GGAGACCGTC	16020
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AATTCGCTTG CTAGTGGGTA GCCTAGCTTA TCTGGCGATA TTCGGCCTAT TAATCTATCT	16200
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TGCTGGCTTA CTCTTGATTT TTGAGGCTTA CTTGGTTTGG AAATATGGTT TGGACAAGTC	16320
CGTTCTAAAA GGGACCATGG CTCAGGTGTG GACAGATCTG ACTGGTTTTT GAACGACTAG	16380
CTTTGCTGGA GGGGGCTTGA TCGGGGTGCG TCTTTATATT CCAACAGCCT TTCTCTTTTC	16440
AAATATCGGA ACTTACTTTA TTGGTTCTAT CTTGATTTTA GTGGGTCTC TCCTAGTCAG	16500
CCCTTGGTCT GTTTACGATA TTGCTGAATT TTTCAGTAGA GGCTTTGCCA AATGGTGGGA	16560
AGGGCACGAG CGTCGAAAAG AGGAACGCTT TGTCAAACAA GAAGAAAAAG CTCGCCAAAA	16620
GGCTGAGAAA GAGGCTAGAT TAGAACAAGA AGAGACTGAA AAAGCCTTAC TCGATTGCCC	16680
TCCTGTTGAT ATGGAACCG GTGAAATTCT GACAGAGGAA GCTGTTCAAA ATCTCCACC	16740
TATTCCAGAA GAAAAGTGGG TGAACACAGA AATCATCCTG CCTCAAGCTG AACTTAAATT	16800
CCCTGAACAG GAAGATGACT CAGATGACGA AGATGTTTCTG GTCGATTTTT CAGCCAAAGA	16860
AGCCCTTGAA TACAACTTC CAAGCTTACA ACTCTTTGCA CCAGATAAAC CAAAAGATCA	16920
GTCTAAAGAG AAGAAAATTG TCAGAGAAAA TATCAAAATC TTAGAAGCAA CCTTTGCTAG	16980
CTTTGGTATT AAGGTAACAG TTGAACGGC CGAAATTGGG CCATCAGTGA CCAAGTATGA	17040
AGTCAAGCCG GCTGTTGGTG TAAGGGTCAA CCGCATTTCC AATCTATCAG ATGACCTCGC	17100
TCTAGCCTTG GCTGCCAAG ATGTCCGAT TGAAGACCA ATCCCTGGGA AATCCCTAAT	17160

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CGGAATTGAA GTGCCCCAACT CCGATATTGC CACTGTATCT TTCCGAGAAC TATGGGAACA	17220
ATCGCAAACG AAAGCAGAAA ATTTCTTTGA AATTCCTTTA GGGAAGGCTG TTAATGGAAC	17280
CGCAAGAGCT TTTGACCTTT CTAAAATGCC CCACTTGCTA GTTGCAGGTT CAACGGGTTT	17340
AGGGAAGTCA GTAGCAGTTA ACGGCATTAT TGCTAGCATT CTCATGAAGG CGAGACCAGA	17400
TCAAGTTAAA TTTATGATGG TCGATCCCAA GATGGTTGAG TTATCTGTTT ACAATGATAT	17460
TCCCCACCTC TTGATTCCAG TCGTGACCAA TCCACGCAA GCCAGCAAGG CTCTGCAAAA	17520
GGTTGTGGAT GAAATGGAAA ACCGTTATGA ACTCTTTGCC AAGGTGGGAG TTCGGAATAT	17580
TGCAGTTTTT AATGCCAAGG TAGAAGAGTT CAATTCCTAG TCTGAGTACA AGCAAATTCC	17640
GCTACCATTG ATGTGCGTGA TTGTGGATGA GTTGGCTGAC CTCATGATGG TGGCCAGCAA	17700
GGAAGTGGA GATGCTATCA TCCGTCTTGG GCAGAAGCGG CGTGTGCAG GTATCCACAT	17760
GATTCTTGCA ACTCAGCGTC CATCTGTTGA TGTCATCTCT GGTTCGATTA AGGCCAATGT	17820
TCCATCTCGT GTAGCATTTG CGGTTTCATC AGGAACAGAC TCCCGTACGA TTTTGGATGA	17880
AAATGGAGCA GAAAACTTC TTGTCGAGG AGACATGCTC TTAAACCGA TTGATGAAAA	17940
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CTTCATCAAG ACTCAGGCAG ATGCAGACTA CGATGAGAGT TTTGATCCAG GTGAGGTTTC	18060
TGAAAATGAA GGAGAATTTT CGGATGGAGA TGCTGGTGGT GATCCGCTTT TTGAAGAAGC	18120
TAAGTCTTTG GTTATCGAAA CACAGAAAGC CAGTGCGTCT ATGATTCAGC GTCGTTTATC	18180
AGTTGGATTT AACCGTCCGA CCCGTCTCAT GGAAGAACTG GAGATAGCAG GTGTCATCGG	18240
TCCAGCTGAA GGTACCAAAC CTCGAAAAGT GTTACAACAA TAAAAAATA GCTTCTTTCC	18300
AAGTTTGGAG GGAAGCTATT TTAGTGGCTA TTGATTGCTT TTATTTTCTG AAGTTGGCGC	18360
ATTGGACTGT TTTTCGTTTT CAGTAGCAGG TTTACTTGAA GCAGGAGTAG AAGAGTCCTG	18420
AGTTGCTGTT TTCTGATCTT CTTTTTCTC TTCCTTGACG CTAGATTTTG GTGTTTCCTC	18480
TGCTGTGTT TTTTCTTGAC TAGTGTTAGT CTCTTTAGTT GGACTGGTGT TTTCTTTAGG	18540
GGATTCCTTT TGGAATTCCT TGACAATGGT TGTCGTCTGG CTGTCTGTAG GTTCTTTTTT	18600
AATATTTTGG TTATTATCCA AGGCGTT	18627

(2) INFORMATION FOR SEQ ID NO: 114:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 2560 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 114:

TAAAATACGT TACCTTGCTT CTGCACGTTT AGCAGGTAAG TCATTGAAAT TTAAAGATCA	60
AGATATTACA ATTGAAGAAA CGACTGAAAC AGCTTTTGAA GGAGTTGATA TTGCTCTCTT	120
TTCAGCAGGT AGTTCTACAT CAGCTAAGTA TGCACCATAC GCAGTAAAAG CTGGCGTGGT	180
AGTAGTAGAT AATACATCTT ATTTCCGTCA AAATCCAGAT GTTCCTTTGG TTGTTCCAGA	240
GGTCAATGCT CATGCACCTG ATGCTCACAA CGGAATCATT GCCTGCCCTA ATTGTTCAAC	300
AATTCAAATG ATGGTGGCTC TTGAGCCGGT TCGCCAAAAA TGGGGCTTGG ACCGTATCAT	360
TGTTTCAACT TATCAAGCCG TTTCAGGTGC TGGTATGGGA GCAATTCCTG AGACACAACG	420
TGAACTTCGT GAAGTCTTGA ATGATGGTGT GAAACCACGT GATTTCATG CGGAAATCTT	480
GCCTTCAGGT GGTGACAAGA AACATTATCC TATCGCCTTT AACGCTCTTC CACAAATTGA	540
TGTTTCACT GATAATGATT ACACGTACGA AGAGATGAAG ATGACCAAGG AACTAAGAA	600
AATTATGGAA GATGATAGCA TTGCAGTATC TGCAACATGT GTGCGTATTC CAGTCTTGTC	660
AGCTCACTCT GAGTCTGTTT ATATCGAAAC AAAAGAAGTG GCTCCAATCG AAGAAGTAA	720
AGCAGCTATC GCAGCCTTCC CAGGTGCTGT TCTGAAGAT GATGTAGCTC ATCAAATCTA	780
TCCTCAAGCT ATCAATGCAG TTGGTTCGCG TGATACCTTT GTTGGTCGTA TCCGTAAAGA	840
CTTGATGCA GAAAAGGAA TTCACATGTG GGTGTTTCA GATAACCTTC TCAAAGGTGC	900
TGCTTGAAC TCAGTTCAGA TTGCTGAAAC TCTTCATGAA CGTGGATTGG TTCGTCCAAC	960
AGCCGAATTG AAATTTGAAT TAAAATAGTC ATATCGTTTA GGAGTTCAGA TGAATCCTT	1020
CTTTGAAATA GAGAGGTGTT TTCGTGTCTT ATCAAGATTT AAAAAATGT AAAATCATT	1080
CAGCCTTTAT TACCCCTTC CATGAGGATG GTTCCATTAA CTTTGATGCT ATTCCAGCCT	1140
TGATTGAGCA TTTATTTGGC CATCATACGG ATGGAATTC TCTCGCAGGA ACGACTGCTG	1200
AGAGTCCAAC TTTGACCCAC GATGAGGAGT TGGAGTTGTT TCGGCTGTA CAAAAGGTTG	1260
TCAATGGACG CGTTCCTTTG ATTGCGGGTG TAGGTACTAA TGATACGCGT GACTCTATTG	1320
AGTTTGTCAA AGAAGTAGCG GAATTTGGTG GTTTCGCAGC TGGGCTTGCT ATTGTTCTT	1380
ACTACAACA ACCTTCTCAA GAAGGATGT ATCAGCACTT TAAGACTATT GCAGATGCTT	1440
CTGACCTACC AATTATTATC TATAACATTC CAGGGCGTGT AGTTGTCGAA TTGACTCCAG	1500
AAACCATGCT TCGCTTGGCT GACCATCCAA ATATTATCGG TGTCAAAGAA TGTACTAGCT	1560
TGGCTAATAT GGCTTACTTG ATTGAGCACA AGCCTGAAGA GTTCTTGATT TATACAGGTG	1620
AGGATGGAGA TGCTTTCCAT GCCATGAACC TTGGGCGGA TGGGCTTATT TCTGTTGCCT	1680

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CTCATACAAA TGGGGATGAA ATGCACGAGA TGTTTACTGC GATTGCAGAA AGCGATATGA	1740
AGAAAGCCGC AGCAATTCAG CGTAAATCA TTCCTAAGGT TAATGCTCTC TTCTCTTATC	1800
CAAGTCCTGC TCCAGTTAAG GCAATTCTTA ACTATATGGG ATTTGAAGCT GGACCCACTC	1860
GTCTACCTCT TGTTCAGCA CCAGAAGAAG ATGCCAAACG CATTATCAAG GTTGTCGTAG	1920
ATGGCGACTA CGAAGCAACT AAGGCAACTG TAACAGGGGT CTTAAGACCA GATTACTAAT	1980
AAAGACAATA AAATCCGGCT CTTTGTCAAC TGTAAGTGGT TGAAGTCAGC TAAGCTCGAG	2040
AAAGACAAA TTTTGTCTT TCTTTTTTGA TATTCAGAGC GATAAAAATC CGTTTTTTGA	2100
AGTTTTCAAA GTTCCGAAAA CCAAAGGCAT TGCCTTGAT AAGTTTGATG AGATTATTGG	2160
TCGCTTCCAA TTTGGCGTTT GAATAGGGTA GTTGAAGGT GTTGACGATT TTCTTTTGT	2220
CCTTTAGAAA GGTTTTAAAG ACAGTCTGAA AAATAGGATG AACCTGCTTC AGATTGTCTT	2280
CAATGAGTCC GAAAAATTC TCCGGTTCCT TATTCTGAAA GTGAAACAGC AAGAGTTGAT	2340
AGAGCTGATA GTGATGTTT AAGTTTTGTG AATAGCTCAA AAGCTTGTTT AAAATCTCTT	2400
TATTGGTTAA GTGCATACGA AAAGTAGGAC GATAAAATCG CTTATCACTC AGTTTACGGC	2460
TATCCTGTTG AATGAGTTT CAGTAGCGCT TGATAGCCTT GTATTCGGGA TTTCGATGA	2520
AACTGATTCA TGATTGGAC ACGCACACGA CTCATAGCAC	2560

(2) INFORMATION FOR SEQ ID NO: 115:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 11303 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 115:

TATTGGATTT CCCTTGCAAT CAGTTTATGG GACAAGCACC CGGCAGCGCA GAGGAAATCA	60
ACGCCTTCTG TAGCCTACAT TTTCAAACCA CCTTCCCACG TTTTGCCAAG ATTAAGGTCA	120
ACGTAAGGA AGCAGACCCCT CTCTATGTCT GGTACAAGA CCAGAAATCC GGCCCACTAG	180
GAAACGACT CGAATGGAAT TTCGCTAAGT TTCTCATCGG TCGAGATGGG CAAGTCTTTG	240
AACGCTTTTC TTCAAAAACA GACCCAAAAC AAATTGAAGA GGCGATACAA ACTCTACTAT	300
AATTCACAAT CTCACTATGA TTAGGTTTCC TTAAACCTGA TGAATAGTGA GATTTTTTGA	360
TGGGCTTTGA CTAAATAGA AAAACACCCC ATGATATGAA ACATGAAGTG TTGTAAAGTC	420
TATGTTGTAG GTGCTTATTT CACAATTCA ATGTGACCAG TGATAACGAA TACCATACAG	480

832

AATCTTCATA TACACTAAAC AAATGACTTT CTAATTATTT CAATTAGTTT TGGCTAGTAA	540
ATATCATTTT CAACAAACGC CCTCTCAATT CCTTATCCTG ATGATGCAAG ATATTCATTA	600
AGTCATGAGA GTTTTTCGCA TTGATGAATT GATTIAACAA TCTATCTTTT AATTCATATG	660
GAAGAGAAGC TGICTTTAGT AGTCTAAAAA CTTCGTCATT TAAAGATGTC CTTTATTAT	720
CTTCCATTTC AAATTTAGCT GTATCATTTCT TATTTGGCAA TTCAATTATA GACACATTCG	780
TTCCCTTAAA ATGAATTCTA TGTTTTCTAT TGCTTGAAC GATACTAGAA TCTCCTTGTA	840
ATGCTAACTC TACCATTCCC ATTTCCCAAT CGATTGATAA TCTTGTTTTA TATCTTTGAC	900
CATTTTGATC TTCAAGCATT TCAAAAGAAT GTTGTTTTCC TGGGAATACA TACCAATCTA	960
CAACTTCAGG TAAATCAACA CCCATACCTA TCTCAGAACC AACCAAGGGA ATGATTGCAC	1020
CACTTTTTGC AAACACAGGC GTAGTCGAGA TGTCCTATA AACACTTAAC TTCACACCAC	1080
CTGTGTATTT TTTCTCTGAA AAGAAGTCAT ACCATTCACC TTCAGGGAAC CATACATCTA	1140
CTTTTGCAGA TTGGAATGTC AAATCCATCT TTTCTACAAT GGGAGCCACC ATCAGTTCTG	1200
TTCCAAAAA GTATTGGTTT GGAACATTAT AGCTCTCATC ATTCTCTGGA TAGAAATAAT	1260
AGATTGGACT GATTAAATGGG GCACCTTCCT CATGTGTCTG TACATTCAATG GTATATAGAT	1320
AGGGAATCAT CTGATGTCTC AAACGAAGGT ATTTCTTCAT AATCTTAGAT GTTGTTCCTG	1380
AAAAAAACCA AGGTTCTTTA CTATTAAAAG GACTTCTAGA ACTATGTAAT CGAGTAATCG	1440
GACTAAAAAC ACCAACTGT AGCCATCTAG TTTGTAGCTC TTCGTCATAA TCCCCAACA	1500
TATGTCCACC GATATCATGA CTCCACCAAC TATAACCGAT ATTAGATGCT GTCGCTGTAA	1560
AATAGGGTTG AAATCTTAAG GAATTCCAAC TAATAATAGT ATCCCCTGAA AAACCAACAG	1620
GGTAGCGGTG ACTACCAGGA CCTGCATATC TTGATAAAAT CAAACCACCT TCTGCATTTT	1680
TACAACTATC CTGATAGTGA TAATGGTTTA AAAGCCAAAG TGGATCTAGC ATACCTTGTG	1740
TCCCCTGTGT CCAGTCAATC CACCAAAAT CTACTCCCTG CTTTCTAGT TCATAATGAA	1800
CATCTTTAAA GTAGGCTTCC CTAAAAGAGG GATTAAAAA ATCAAAAATA GCAGGTCTT	1860
CTAGTTCTAC ATTTAACCCC AACCGTTTGT CGATTGAGG ATAAGCTTCT TCATAAGCCC	1920
GTATCCCATC AGCAGGATGG ACATTTAAGG AGAGTTTATG CTTTCTATCA TGAAGTTGTT	1980
GCAATAACTG TTCTGGATTT GGTATTAAGT TTCTATTCCA ACTATATCCT GTCCAGCCAC	2040
TTCCAAAGCG AGCTGGAATG TCAGTTATAT GCCAATCCAT ATCTAACACA CCGATAGATA	2100
ATGGAATTTT CTCTGTTTCA AATCTGTCTA TTAAATCCAA GTATTTCATCC GACGTATAAG	2160
GCCAATATCT ACTCCACCAA TTGCCTAAAAG CATATCTTGG CAACAAGGGT GTTGAACCAG	2220
TCAAATGGTA AAAATCTCTG ATTGCTCCTC TATAATCATG CCCATAGGCA AAGAAATACA	2280

GGTCAATTTG ATTTTCTCTC TCAATATAAC CAGATTGTTC ATCCCAAATA AATCCTTGAG	2340
AATCATCCAA TAAGGCTATA CCATTTTCGGC TAATAATTCC ATCTTCTAAC GAGATTGCTC	2400
CATCTGCCTT ATCCAGAGTC CGAGCTGTTC CTTTTAACGT TTCAATAGAT TCACCAAAAT	2460
ACCAGCGACT ACCATATACG GCAAAATTTC CTTTTAATTC TATAAATAAA TTTTCGGCGT	2520
TAAATTTCTCC TTTATTAAAG TGCAGATGAA AATAGTCCGT CATAATATCT AGTACGTTTG	2580
ATGTCTCGAT ATAATCTAAC GAAATTTGGC CAAAATCTCT ATTATAGATA AGTTGTGTCG	2640
TTCTATCCTC AAAACTTCCA GTTTGAGAGT ATTCTAACCT TACTAGCTTG TCTGTTAATA	2700
CAGAGATTCG ATAAAACTCT CCCTTAAAAA TTTTCAATTT GTTTTCCTCC TTTTATGGTA	2760
GCATAAAAAC AGAACGCACC ATTTTGTATG CGTTTTCAT TATTCTGAAT GCAATGTCT	2820
ATCTGTTATA TCTATGACAA ATAATAGTCA ATTGAAAAA TGCAGTGGAC AAAATATCTT	2880
TTAACAAACC AAGAGTTTAT TAAAGAGTTA TCACTTTTCA ACTTTTCTAA GCTTATGCAG	2940
TTGTGAAACA AACTACTTTT AACTATTA CTAAGATAGG ATTGATAAAT AATTTCAAAC	3000
TCTTACTAGC AATCATACGA TATTCAAGCT CACGTGCTTT TTTCTTCTCT GCTTATTTCT	3060
TAGAACTGAA GAACCCGGAT CGGTATATAA ATTATCCGGA TCAACATAGT CATAAGATTC	3120
ATAACAGTTG CGCTTCATTA AGTCATCCCC AGAGCAAGAG CTTCATCTCG TAATTTTTC	3180
ACATCACTAA CCGTAGGTCG CCATCCTTCA ATCATATTTG TACTTAAAGC ATACCAAACA	3240
CTCTTAAAAA CGGATCGGTT TTCAAAAGCT ATTCCCATGA TTGTCATCTT TTCTTTATCT	3300
ATATCTAAGG ACATATGCTA CCTCCTTTAG ATACATTATA CCATGTTTCT CTGTAGCTTT	3360
TAAAAATTTT ATTTTGTTTG TCATATCTAA GTTTTCAGCA CGCTTATCCT ATTTTATAAG	3420
CCTCAAACCC AAATATAAAA CGCATTCTTT TTGCTTTTTT ACTATTGIAT CGTATTCTAC	3480
GATAACATAC TTTACTTTAT TGTPTTTTFA AATAACAGCA GTTCCCTGTT TATCAACTAT	3540
TCGAACTACT TTCTATTTTG CTTCATACCC TACATAGCGA AAAAATATGA AAAAGCAGAG	3600
AAGAATATCT TAAAAAGACC TCTTCACTGC TAATATTAAC ACTCATTATT TAACTATAT	3660
GGATTCTATC ATCGAGTATA CTTTTTACT TATTAGATAC CTGCTCTTC TTTCACCAAT	3720
TTTTGATCAT ATACACGGAT GAATGGAAGA TAGACTAGGA ATGCTGCAAA TGCACATACT	3780
AGAGCAACTA ATACAGCTCG AAGATCTGCT GTCCCTAAGA AAGCTCCAAT CCCTACTGGA	3840
GTTGGCCATG GAACCTGTGC GATAATTGGC TTAATAAAGT TTAGAGAATT CGCTACGTAA	3900
TAAATAGTAG CAGTAACCAT TGGTGCTAAA ATAAATGGTA TAGCCAAGGC TGGATTATAG	3960
ATAATAGGTA ATCCAAAAAT TAATGGTTCA TTAATATTAA ATAAGGCTGG AACTACAGAT	4020

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GCTCGTCCTA TTGCTTTAAG CTGTTTCAGAT TTAGAGGCAA AAGCAATATA TAAACATAGT	4080
CCTAAAGTTG CACCAGAACC ACCTGCAATT ACAACATAT TAGAAAATTC ACCTGCAACA	4140
GCGAAGTGCC CGCCAGCAGC ATTTTCAGCC ATGTTAGCAA GAGCAATTGG ACTAACAAAT	4200
GCAAAAACAA TGTTGCGACC GTGGATACCT ACAATCCAAA GTAGTTGAGT CAATAGATAA	4260
ATAATCATTA AACCAATCCA CGAATTAGTC AGATTGGATA CAAAACCAA TGGAATTGCA	4320
ATGACTTTAA AAATATCTGT TCCCATTGCT ACAAGAAGAC CGTTGATAAA GATAACAACA	4380
AATGCAACAA CAAATCCCGG AACCAAAGCG GTAAATCCAC GAGAACTCC TTCTGGAACA	4440
GCTTCAGGCA TTTTAATAAC CCAATTATGT TTAACACACA TACGATAAAT AAGAACAGTC	4500
ACAAATTGCCA TAATGATTGC GGTAAAAATC CCTGTTGTCC CAAAACGTGC GACTACATTT	4560
CCCATTGCCC ATCCATCTGC AATTACTGCA CCTTCTTTTA GACTTGTCAC AGTCTTCATC	4620
ATTCCACCAT CAAAATGAT TTGCGGTACT GTCATGACAA AAGCCATCAA GGCAAGCAAG	4680
GCACCATTAA GAGGATTCAT ATTGAGTTCT TCTTCCTCTG CATAAATTTT TGTCAATTCA	4740
TATGCAAGTG ATAGAACGAA ATAAAGAGAT AGAGAACCCA TAGTCGCATA GTTTGCAACC	4800
ATGTAAAGTG ATGTGAATTT ATCAAATGAA GCAGAGAAAA TATCTGCCAC AATTGGCCAA	4860
AATGAGAAA CTTGTGGCAA AATACTGAAT ACCAAAAACA TTGATCCTAC AATAGTAAAT	4920
GGTACAGCAG CCATACCTGC AGCCGTGATA GCACGTACTA CTTTAAACTG AGCAAGTTTG	4980
CCCATTGGTC CCATAACATG GTTTTCAAGA AAACCAAACA ACCCGTTTTC TTGATCCATA	5040
AATAGACCTC CTTAATAAAA CATAATAATT TTTACTTTCT AAAGACTAGT TTCAAATACA	5100
AATTATACTA GATCAGGATT ATAAACTAAG TGAGTTCTTT TCCAATTGGA CAAATTGTTG	5160
ATAAGCCTTA TCTGTTGTT TATAAATTTT TTTAATTCTT CTAATGTCTA ACAAACCTCAG	5220
AACTAAACCT AATAGAAGAA CTACAAAAAC AAATAAACGT GCTACTTGGT TATTTTCAAA	5280
AATCGGAAAA AGATTCTTAA ACCAACTTGT CCAAGTTAAA ACAAGTAATC CTATTGAAAT	5340
AAGCATTGTG ATTCTAACAA ACATTAGTGT TATTCCCAAC TTTTCTTTCC TATTTCCAFA	5400
AAGTTTAAAT TGTTCAACAG TTGCTAAAAT AGAAAATACT ATGAGCATAA TGGGGAAAAT	5460
AATAATAGGC GAGGGACTAA TAACTGACT CAAAAGCCAA TAAATATTCC CAAAAAGAA	5520
GAGTGCTATT GAATAACGTA GAAGAAGATA TCGATTGAAA AAAGTATTAG TTAGAGCCAT	5580
CTCTCGCGT TGTTGTTCAA TCTTTTGTCTG TTCTTTTTTA TCCATATCAT TTCTCTCTTA	5640
TATAACAACA CATATTTAGT TAACTTTCTT ATAAAGAGCT AACATTTCTT TTGCTACTTC	5700
TAATAATGTC ATAGTGGTCA TTAAATGATC TTGAGCATGT ACCATGATAA TTTCAATTTT	5760
AATTTCCACT CCACTTGCCT ATTCTTGCAA GAGTTTGTT TGTGCATGAT GCGCTTCAAG	5820

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AATTATCTCA	TTTGATTGAT	TTAATTTACT	TTCTGCATCA	TCAAAACTAC	CTTCTCTCAT	5880
TTTTGCAAAT	GCTTCATGTA	TTTCTGACCT	TGCATTTCCC	GAATGCAGGA	TAATTTCAAA	5940
TGCTGCAACC	TGCAGTTCCT	CITGATTCAT	ATAAACCTCC	TATTTTATCT	TCTCAAATAT	6000
GTTAATAAAA	TCTTCAAAGT	TATTGCAAGA	TATTAGCTGA	TTTTCGAATT	CATCATCTCTC	6060
TGTCAGAGAG	ACTATCTTTT	TAGTCACAGT	TGCCAAACCT	TCGTTCCCAT	ATATTGATGG	6120
AGATAGAAGA	AATACTAGCT	GGACATGTGA	ACTTTGATTA	TCCCAGAGTA	ACGAATCTTT	6180
ACAAATTGCA	ACCGAAACCT	TTCCCTCTGT	ACCAAAGGCG	TGAATAGGAT	GCGGAACTGC	6240
AATTTTTTCA	GA AAAAACAA	CTGAACCTAA	TTCTTCGCGC	TGTTTAATTC	CATAAAGTAA	6300
AGATTGTTCA	AACTCATTTG	ATTCACCAAC	AGATAAACTC	TCAACCATCT	TTTCAAGTAA	6360
ATTTACCTTG	TCTGATTCAG	TACATATTAA	AAAGTTTCT	TTACTAAAT	ACTGTCTAAA	6420
GCCGTGTGTT	TCAAATTTGT	TAATCTTTGA	TGATTGTACA	TAAGTAGAAA	CTTGCATCTA	6480
ATCCATAGCT	TTTCTAATCA	TTTCCATCTC	ATCACTCTTA	AGAAACACAC	TAAGTTTAAA	6540
AACTGGGATT	TGAAAATATA	GATTTGATAA	ATCAATAGCT	GACACTATAA	AATCTATTCC	6600
TTTAAGTTTT	TCTTGATTCA	ATTCATAGTA	GCCTATTACA	TCAACAACCT	CTACTCGCTT	6660
CCCAAACCTC	GTTTCCAAAC	GATTTCTTAA	CATTTGGGCT	GCACCAAATC	CTGTTGCACA	6720
AATAGCAAGA	ATATTAAACT	TAGTACTCTC	TTTGCTACGT	TCCATAGCAG	CTAAAAAGTG	6780
AAGACTTACA	TATGCTACTT	CATCATCTGA	TATTGTCCAC	TCCAAGAAGT	TGTCCATATT	6840
TGCAAGAATT	TCTCTAGTCA	TAAAGAATAT	ATCACTATAA	TTCTGTTTAA	TTTCACTCTAC	6900
CAAAGGGTTA	TTTAAGGTAA	TCCGGCTTTC	TAAACGTACT	TGTAGTGTCA	TTAGATGAGT	6960
TATCAATCCT	TCAATTAGTT	GGAAATCTGA	AGAAAAGTTA	TACATATCAT	CTAATCCTAA	7020
ATTCTGAAAT	GTTTTAAATA	AAGATTTTTT	TAAAACCTCT	TCAGAAATAT	TCTTCTGATT	7080
TTTTTGACAT	TGTTGACTCT	TAGCTAACAA	ATGCAAAGTA	ATGTAGTCTA	TTTCCTGAAC	7140
TGGAAATCC	TGATTGTGTA	CTTCTCTTAC	TTTAGAAAGA	ATTCTTTGGG	CAACCTTTCT	7200
CTCTATTGCA	TCATCAGTCA	TCTGACAGTC	TATATTTTTT	ATTTCAAATC	CGGATTTTAA	7260
ACGAATCACA	GACAATGCTA	TGTGAACTAC	TAAATTCTGT	AGTACAAAAT	CAGATAGTTT	7320
TAGGTTGGCC	TCTTGGCATT	CATCCAAAAC	AATTCCTAGCA	AATTCCTTCTA	ATGGAACAGT	7380
TTGATCAAAA	AAGTTAAATT	TTACATAGCA	ATGTATTGTT	TTAAAAAATT	GATTCTCTAG	7440
GAAATAATTT	ATGATAAAAC	GTCGTTTATC	ACGTTCTCTG	CCTGAGACAT	AACTCTCTTT	7500
ATTCGCCCTA	CTCTCAATGG	ACAAATTATA	CTCTGATAAC	ATCACTCGTA	TCTTTCTGAA	7560

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ATCATGAGAT AATGTTGAAC GACTAACGTA AAGTTCATCA GCTAAATCAT CAAAAAGAAC	7620
TGGAACCTTGC TCAAAATAATA ATTATTATTAA GATAAATACT AAACGATCAT CACCTTTTGA	7680
AACCGCAGTT TTCGTATAGT CTTCTTCCAG TTCATAAGTT TGTCTAAACT CCTGGTAAGC	7740
GCCTTGATTC TCAAAAAATA TTTGATACCC TTGACCTTGT TTTGAAATCA ACCGGACTCC	7800
TTGAATAATC ATTGTCTTCT CAATTAATTT CAGTACATTA CGGACAGTTC TATCTGAACA	7860
GGATAAATAT TCTGCCAGTT CTTTGCTTGT AACAAAACGT TCCTTATTTT TTATTAAAAA	7920
TTGAAGGATA TCTTTCTCTT TAATGTTTAA CACATTCATT CCCTCCTAAA ACGTATGTTT	7980
TCATATATTG AAGCATATTA TACACTTAAA TCAGTTTATA TCAAACCTCAA AACAATTTAT	8040
CTTAACCTAA ATATTATTG ACATTTTCATG TGTTCATCAA ATATTCTCAA GAATCAAATT	8100
AGCCATTTTT TCAATTCCCA TTGGAATAGG AATATAGGCT TGAGGAGGTA TTTGTACAAC	8160
TGGTTTTCTT GCTTTAGAAC CAGCCTCTTC AAATTGCTTA AAGTACATTT TTTGTTGAGG	8220
ACTGACAAGA TACAAATCAA AAGCTGCTGC TGCGATAGCT TTCCTCCTT CAGTAGCACT	8280
AATAGCATCA ACTACAATAT CTTTCCCTTT TCCTTTTAGA AACTCTGTTG TTTTCTGTGC	8340
CATAAGTGAT GAAGACATTC CTGCTGCACA AATAATTAAA GCTTTTGCCA TAATATTTTC	8400
TCCTTTTCTT AAATCCAATC AAAGCTGTGC TAAGTTGGCT TATTGTGTAT CTATTTTAT	8460
TATAAAATAA AGCGTTTCCA ATGACAATTC CCTCATTTTC CTAAATGATA TGGAAAAAAA	8520
TTATTTATAC TTCAATTTAT AAAATAAAAT TATTCCTGAG AGTAGAAATG AAACACTATT	8580
TGCTAAAATC AAAGGCAAGT CTCCTATACG AATACCATGA GCAAGCCACA ATGCAATACC	8640
AATAACTTGC ATAACATACA TACCTAGAGC AATAGATCCT GTGTCCTTTG TCTTAACTAC	8700
ACGAAAAACT TGTGGTAAAA ATGCAAATGT TGTTAAATTT GCTGCAATAC TTCCAATCAT	8760
ATGTCACCTC AATATGCTAA ACAAACTGAG AATAATCTCA GTTTGTTTAT ACTATTCTAC	8820
TGATTACCGG TTAGATGAAA TAACCTCCTT ATACCAGCCA AAAGATTTTT TCGGGGAACG	8880
ATTATAACTT CCCTTCCCAT TATCATCTTT ATCTACATAA ATAAAGCCAT AACGTTTCCG	8940
CATTTACCGG GTACCAGCTG AAACCAAATC AATACATCCC CATGGAGTAT AACCCATTAA	9000
ATCAACACCA TCTTCAACTA CAGCCTTTTT CATTTACGA ATATGGGCAC CTAGATATTC	9060
AATTCATATA TCATCATGTA CCAIACCATC TGCTGCAACT TGATCTATAG CTCCAAAACC	9120
ATTTTCAACA ATAAAGAGTG GTAAGTGATA GTGGTCTGTA AACCAATTTA ACGCATAACG	9180
CAAACTTCTT GGATCAATTT GCCACTCCCA TTCAGAAGCC TTAACATAAT TATTTTTCAC	9240
TAAATCTTCT GTTTCAAGAT AATCAAAATA AGGATTATTT TCACGATGAG AGTCGATAGC	9300
AAAGGACATA TAGTAAGTGA AACCAATGTA ATCTACAGTC CCACCAAGTA AATCTTCTTT	9360

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ATCCTGGGCA GTAAATCAA CTGAAATACC TTTTCGTTCC CAATACTTGA AAATATGCTC	9420
AGGATATTTA CCTAAACAT GCACATCAGC AAAATAATAA CGCTTCTGCA TAGCTTTTCAT	9480
TGCCATTAAAG ATATCCTTAG GATTGCAAGT AACTGGATAA ATTGGACACA TCGCAATCAT	9540
ACAACCTATT TGAAATCTG GATTAATCTC ATGACCAATT TTTACAGCTC GTGCAGAAGC	9600
AACTAATTCG TAATGTGCTG CTTGATACAT AATTGCTTCT CTATTATCAC CTTCTCATA	9660
TACAATACCT GAGTTAGTAA ATGGTGCAA ATCTTCCTGA TAATTCGCTT GATTATTGAT	9720
TTCATTGAAA GTCATCCAAT ATTTAACCTT ATCTTTGTAA CGTTTAAATA CGACTTCTGC	9780
AAAACGAGCA AAGAAATCAA TCAATTCCTT ATTTTCCCAA CCACCATATT CGGTCACTAA	9840
GTGATAAGGC ATTTCAAAAT GAGATAGAGT GATGACAGGT TCAATACCAT TCTTTAAGCA	9900
TTCATCAAAA AGATTATCAT AAAACTGTAA TCCTTCTTCA TTCGGCTCTA ACTCATCACC	9960
TTTTTGAAAG ATACGTGTC ATGCAATAGA GGTACGGAAG CACTTGAATC CCATTTACAGC	10020
AAAAAGTGCT ATATCTTCTT TATAACGGTG ATAAAAATCT ATCGCCTCAT GATTTTGGATA	10080
ATATTTACCC TCTAAACTC CCAAAGTAAT TTCACGAGCT ACTCCATGAC GACCAGCAGT	10140
CATAACATCA GCAACACTAA TTCCCTTGCC ACCTTCTTGC CATCCACCTT CAAGTTGATG	10200
AGCAGCAACA GCACCACCCC ATAAAAATCC ATCTTTAAAA GTAGTCATCT TTTTCTCTCC	10260
TGACTTTGAT ACTCTTATTA TAAACCTTAA ACCAAAAGAT GAAAACGCAT TCTTTTCTCT	10320
TATTTGTTAAG GAAAGAAGTA ATTTTAAATG GAAATAGAAC AATATCTTCT TGTATTCTCG	10380
TAATGATATC TTTACGATTT TCAATACTTT CAAACTACAA AAACCTCTCAC AATAATTCTA	10440
ATTCCTGTG TCTATAAAG ACTTATCGCT TTCTGGCATC CCAGAATCAT CTTCTATATA	10500
ACGTTCAACT TGCATCTGCA AGTGATATTT TTTTCTTAAA TCTAAGATTT TCTGCATTGT	10560
CTTTGATTGA TAATGTTTAT CTAAAGTTTC TTGATTTATC CACTGATCAA TAAGGAGAAT	10620
AGTTCCCTCT TTTTCAATTG GTAAAAATA TTCGTATTTT AAGTTACCTT TTTGATTTCT	10680
AATTTCTTTA ACAAGGCCAC TATCAAGCAT TTCTCTTGCA AACTTTATTG CACTATCTCC	10740
ATCACCTTTA TAATATACAT GAATAGTCAA TGTCATCTTA TATCCTCCAA AATCATCCTT	10800
CAATTTTAAA AAAACAAGTT TAGATGAGGA TCTAAACTTG TTTTATGA ACTAATTATC	10860
TAACGTTTCG CCATTACTTT CAATCACTTC TTTATACCAA TAAATGATT TTTTCTTATA	10920
GCGATTTATA GTCAATTGAA ACAAGAGCAG GACAAAAGAG CCTCATAAAA GGTATTGCAA	10980
CTTGGAATA CCTTTTGTAG GTGCTTTTGT ATATGAGCCC ATGTTTCTC AATAGGATTG	11040
TACTCAGGTG AGTAGGGAGG AAGAGGTAAA AGTTTATACC CAAACTCTTC ACACAAGAGT	11100

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TCTAGCTTCC CCATCTCTATG GAATCTTGCA TTATCCATAA TAATAACCGA TGGTGTGGTT	11160
AATGTTGGTA AGAGAACTT CTGAAACCAA GCTTCAAAAA AGTCGCTCGT CATCGTCTCT	11220
TCGTAAGTCA TTGGAGCGAT TAACTCACCA TTTGTTAGAC CTGCAACCAA AGAAATCCTC	11280
TGATATCTTC TTCCAGATAC TTT	11303

(2) INFORMATION FOR SEQ ID NO: 116:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 3112 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 116:

CCTTAGATTT CCACTTGCCA GAGGAATTGA TTGCCCCAAC GCCCCTTGAA AAACGTGATG	60
CCTCCAAACT CCTCATCGTC AACCGTGAGA CAGGAGAAAT GCAAGATAAA CATTTCCTACT	120
CTATTATTGA TATGCTGGAA CCTGGTGATG CCCTTGTCAT GAACGACACC CGAGTTCTCC	180
CTGCCCCGCT CTATGGTCAA AAAGTGGA GAGGAGGTCA TGTGGAACCT CTCCTCTTCA	240
AGAACACTAG TGGAGACGAG TGGGAAGTTC TGGCTAAACC TGCCAAACGC CTCAAGGTGC	300
GTACTCGTAT CAGCTTTGGT GATGGCCGCC TCAGCGCTGT CGTTACAGAA GAATTGACCC	360
ACGGGGGACG CATTGTCCGC TTTGAATACC AAGGAATTTT CCTAGAAGTC TTGGAAAGTC	420
TGGGAGAAAT GCCTCTGCCA CCTTATATCC ACGAAAAATT AGATGACCGT GAACGTTATC	480
AAACCGTCTA CGCCAAGGAA AGTGGCTCTG CTGCAGCACC GACTGCTGGT CTTCACTTCA	540
CCAAAGAACT GCTGGCAGAA ATCCAAGCTA AGGGTGTTCA TCTAGTCTAT CTGACTCTCC	600
ATGTCGGA CTGGAACCTTT AGACCTGTTT CTGTGGATAA TCTGGACGAA CACGAAATGC	660
ACTCAGAGTT CTATCAACTT TCTGAGGAAG CTGCTGCCAC CCTTCGCTCT GTCAAAAAA	720
ATGGTGGTCG TGTCATCGCT GTCGGAACCA CTCTATCCG CACCTTGGA ACTATTGGTT	780
CCAAGTTTGA TGGGCAATC CAAGCAGATT CTGGTTGGAC CAATATCTTT ATCAAACCTG	840
GGTATGAGTG GAAGGTCGTG GATGCCTTCT CAACCAACTT CCACCTGCCA AAATCAACTC	900
TGGTCATGTT GGTTCCTGCC TTTGCAGGCC GTGAATTAGT CTTAGATGCC TACCACCATT	960
CCATCCAAGA AACTACCGC TTCTTCAGTT TTGGTGACGC CATGTTTATT TATTGAGAAA	1020
GAATTTCTCT AAATCTCTA ATACCAATAA ATCGCTAAGA TATTATTTC AAGAACATCT	1080
ACAATTGAAA CTCTAGCTAG CTGTAGAAGA GGCCTAGTAC ATTGAAATTA AAATGCTTCC	1140
CCCTAGCTTC GAAATATTG CCATAGATTG CGTTGACTCT CCAATTCAT TCATCTATAT	1200

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TTTATTTTCAG CTTCCCTATAC TTTCTTCGCT GTTTGTAAAT CAAAATGCAA GACACATGAG	1260
TAGCACCATA TTTGTTACTC TTATCTGTCC TCTCAAGAGA CTATTATGAG TTATTTTCAGA	1320
ATCATTCACT ACTTTGACCC TGACTCTCCT TAGTCTCAA ATCAAAGACT TATACTCTTC	1380
AAAAATCTCT TCAAACCGCG TCAACGTCAC CTTGGATTAT ATATGTGatC TGaCTTCGTC	1440
AGTTCTATCT ACAACCTCAA AGCAGTACTT TGAGCAACCT GCGACTAGTT TTCTAGTTTG	1500
CTCTTTGATT TTCATTGAGT ATTAAACAAA AAGTGAACAA ATCTGAATTC TAATGTACAG	1560
AAGACTAGGC TTGTTCACTT TTTTATAGTC GCTATAAGAT GACCTTATCT ATAGCTTTTT	1620
ATATATAATT ATATATTCAG ACATACTATT ATCAATTTTG TCGCAGGGAG GAATCTGTTA	1680
ACGCACCCAT TCACCATTAT CATTGACTCT ATAGCCATCT ATACTGTAT TGACCGCTAA	1740
CTCACCCGAT GTATTTACAT AATACCATT ACCACCACT TGGAACCATT GATTGACTTT	1800
CATAGAACCG TTGCTGTTGA GGTAGTACCA TGAACATTA ACTTGTAACC AACCTGTTGC	1860
CATGGAACCA TCAGTATTAT AAAAATACCA CATAACATTT TCTTGTTTCC AGTCTGTGT	1920
TGGAGCAACT GCTTTAGCTG GTTCTACTGC TACATCTGTT CCTTGTTAG ATGTAACAGA	1980
TACAGGATAC GAAGGAATAG ATGATTGCTC AGGAACAACA ACTTTTTCAG GTTCTCTCGT	2040
CCCTCTCCTT ATACGTCTTT TTACCATCTC TTTAGTAATT TGACGAGAAG TAGTTTCTTC	2100
AATTGTTCCA TCACGTTCAT CTACAGTATA GATTGTAGTA AGAGTAATTT ACCAATTCTCT	2160
CCTACTTCTT CTACTTCTTG ACTTTTATCA AGAGTTGGGC CATCGAGATA TTCTGTTTCG	2220
ATTGGAATTT CTTGGACAAG AACTTGGGGC TTGGTTCTTT TTTTAACAAC TCTTGTTTGA	2280
GAGTCTTTTT TTTGACTTAA AGTACTCTCA GTTACTTGTC CACTCTTTCC ATCTACATTA	2340
TAAGTTATCG TTGTAAGTGT TTTCCCATTC TTTCTAGAG TAATCTCTTG CTCCTGTCCT	2400
GCAGAAAGGT CATTGTCTGC TTCATATTTA GTAGCAAAATG GAACAAGAAC TTCTTCAACC	2460
TTGCTTTTAG CTGGAACCTT GATAACTGTA TCCGTGGCTT CTTTCTATC AACAGTAACC	2520
TGTTGCGTAA CATAACCAGT CTCTGGATTA ACATCGTAGG TCCTTGTCGT AGTTACATAG	2580
CCATCCTCTC CATCAATTGT AACAGGATTT TCACTACGGT CTTTGTGTTT ATCTTTTCA	2640
TAACGAATTC GCGTACTTGA AATTTTCTTG GTTACTACCT TAGGTTAGT CGTACTTTT	2700
ACAATAATAT CCCCATTTGTC AGCGTCATCA TACTCTATTC CCTCTTCTTT ATCTCTAGTA	2760
TCATCTCTGA CATATTGAAT CCCATCAGCA GCATGAACAA AACTTGATTT CAGATTCCTC	2820
CTAAAAATAA AGTTAGCCCG ATTACCGCAG AACCAAAAAT CTTTCCGAGT TTACGTATTG	2880
CATAGCGCTT ATTAGTATTA GATTTTGCCA TTACATCCTA CTTCTAGTAT AGCATCTTTT	2940

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CTATCAAACG TTAAACAATA TACGTTATAT ATAAATAGA CTTAGATGA TATATTGATT	3000
ATTGAACTAA CACTTTAACT ATATCGTAAT CAATCTCATA TATAAAGGAT TGCAGACATC	3060
TTATCTAAAT ACATGCCAAT ATATTTAGAT ACAAACATTC CAACTTGATA AT	3112

(2) INFORMATION FOR SEQ ID NO: 117:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 4327 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 117:

CCCCAAAATC TCTTCAAACC ACGTCAGCTT CGCCTTGCCG TAGTATGCTT ACTGACTTCG	60
TCAGTTCTAT CCACAACCTC AAAACAGTGT TTTGAGCATC ATGCgGCTAG CTTCTTAGTT	120
TGCTCTTTGA TTTTCATTGA GTATAAAAC AGATGAGTTT CTGTTTTCTT TTTATGGACT	180
ATAAATGTTT AGCTGAACT ACTTTCAAGG ACATTATTAT ATAAAAGAAT TTTTGAAAC	240
TAAATCTAC TATATTACAC TATATTGAAA GCGTTTTAAA AATGAGGTAT AATAAATTTA	300
CTAACGCTTA TAAAAAGTGA TAGAATCTAT TTTTATGTAT ATTTAAAGAT AGATTGCTGT	360
AAAAATAGTA GTAGCTATGC GAAATAACAG ATAGAGAGAA GGGATTGAAG CTTAGAAAAG	420
GGGAATAATA TGATATTTAA GGCATTCAAG ACAAAAAAGC AGAGAAAAAG ACAAGTTGAA	480
CTACTTTTGA CAGTTTTTTT CGACAGTTT CTGATTGATT TATTTCTTCA CTTATTTGGG	540
ATTGTCCCCT TTAAGCTGGA TAAGATTCTG ATTGTGAGCT TGATTATATT TCCCATTATT	600
TCTACAAGTA TTTATGCTTA TGAAAAGCTA TTTGAAAAAG TGTCGATAA GGATTGAGCA	660
GGAAGTATGG TGTAATAGC ATAGGCTGAT GTCCATCATT TGCTTATAAA GAGATATTTT	720
AGTTTAATTG CAGCGGTGTC CTGGTAGATA AACTAGATTG GCAGGAGTCT GATTGGAGAA	780
AGGAGAGGGG AAAATTGGCA CCAATTTGAG ATAGTTTGTT TAGTTCAITT TTGTCATTTA	840
AATGAACTGT AGTAAAAGAA AGTTAATAAA AGACAACTA AGTGCATTTT CTGGAGTAAA	900
TGTCTTATTT CAGAAATCGG GATATAGATA TAGAGAGGAT CAGTATGAAT CGGAGTGTTT	960
AAGAACGTAA GTGTCGTTAT AGCATTAGGA AACTATCGGT AGGAGCGGTT TCTATGATTG	1020
TAGGAGCAGT GGTATTGGA ACGTCTCCTG TTTTAGCTCA AGAAGGGGCA AGTGAGCAAC	1080
CTCTGGCAAA TGAAACTCAA CTTTCGGGGG AGAGCTCAAC CCTAACTGAT ACAGAAAAGA	1140
GCCAGCCTTC TTCAGAGACT GAACTTTCTG GCAATAAGCA AGAACAAGAA AGGAAAGATA	1200
AGCAAGAAGA AAAAATCCA AGAGATTACT ATGCACGAGA TTTGGAAAAT GTCGAAACAG	1260

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TGATAGAAAA AGAAGATGTT GAAACCAATG CTTCAAATGG TCAGAGAGTT GATTTATCAA	1320
GTGAACCTAGA TAAACTAAAG AAACCTTGAAA ACGCAACAGT TCACATGGAG TTTAAGCCAG	1380
ATGCCAAGGC CCCAGCATTC TATAATCTCT TTTCTGTGTC AAGTGCTACT AAAAAAGATG	1440
AGTACTTCAC TATGGCAGTT TACAATAATA CTGCTACTCT AGAGGGGCGT GGTTCGGATG	1500
GGAAACAGTT TTACAATAAT TACAACGATG CACCCCTTAA AGTTAAACCA GGTCAGTGGA	1560
ATTCTGTGAC TTTACAGTT GAAAAACCGA CAGCAGAACT ACCTAAAGGC CGAGTGCGCC	1620
TCTACGTAAA CGGGGTATTA TCTCGAACAA GTCTGAGATC TGGCAATTTC ATTAAAGATA	1680
TGCCAGATGT AACGCATGTG CAAATCGGAG CAACCAAGCG TGCCAACAAT ACGGTTTGGG	1740
GGTCAAATCT ACAGATTCGG AATCTCACTG TGTATAATCG TGCTTTAACA CCAGAAGAGG	1800
TACAAAAACG TAGTCAACTT TTTAAACGCT CAGATTTAGA AAAAAACTA CCTGAAGGAG	1860
CGGCTTTAAC AGAGAAAACG GACATATTCT AAAGCGGGCG TAACGGTAAC CCAATAAAG	1920
ATGGAATCAA GAGTTATCGT ATTCCAGCAC TTCTCAAGAC AGATAAAGGA ACTTTGATCG	1980
CAGGTGCAGA TCAACGCCGT CTCCATTCTG GTGACTGGGG TGATATCGGT ATGGTCATCA	2040
GACGTAGTGA AGATAATGGT AAAACTTGGG GTGACCGAGT AACCATTACC AACTTACGTG	2100
ACAATCCAAA AGCTTCTGAC CCATCGATCG GTTCACCAGT GAATATCGAT ATGGTGTGG	2160
TTCAAGATCC TGAACCAAAA CGAATCTTTT CTATCTATGA CATGTTCCCA GAAGGGAAGG	2220
GAATCTTTGG AATGTCTTCA CAAAAAGAAG AAGCCTACAA AAAAATCGAT GGAAAAACCT	2280
ATCAAATCCT CTACCGTGAA GGAGAAAACG GAGCTTATAC CATTCGAGAA AATGGTACTG	2340
TCTATACACC AGATGGTAAG GCGACAGACT ATCGCGTTGT TGTAGATCCT GTTAAACCAG	2400
CCTATAGCGA CAAGGGTGAT CTATACAAGG GTGACCAATT ACTAGGAAAT ATCTACTTCA	2460
CAACAAACAA AACTTCTCCA TTTAGAATTG CCAAGGATAG CTATCTATGG ATGTCTTACA	2520
GTGATGACGA CGGAAGACA TGGTCAGCTC CTCAAGATAT TACTCCGATG GTCAAAGCCG	2580
ATTGGATGAA ATTCTTGGGT GTAGGTCCIG GAACAGGAAT TGTACTTCGG AATGGGCCCTC	2640
ACAAGGGACG GATTTTGATA CCGGTTTATA CGACTAATAA TGTATCTCAC TTAGATGGCT	2700
CGCAATCTTC TCGTGTATC TATTCAGATG ATCATGGAAA AACTTGCCAT GCTGGAGAAG	2760
CGGTCAACGA TAACCGTCAG GTAGACGGTC AAAAGATCCA CTCTTCTACG ATGAACAATA	2820
GACGTGCGCA AAATACAGAA TCAACGGTGG TACAATAAA CAATGGAGAT GTTAAACTCT	2880
TTATGCGTGG TTTGACTCGA GATCTTCAGG TTGCTACAAG TAAAGACGGA GGAGTGACTT	2940
GGGAGAAGGA TATCAAACGT TATCCACAGG TTAAAGATGT CTATGTTCAA ATGTCTGCTA	3000

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TCCATACGAT GCACGAAGGA AAAGAATACA TCATCCTCAG TAATGCAGGT GGACCGAAAC	3060
GTGAAATGG GATGGTCCAC TTGGCACGTG TCGAAGAAAA TGGTGAGTTG ACTTGGCTCA	3120
AACACAATCC AATTCAAAAA GGAGAGTTTG CCTATAATTC GCTCCAAGAA TTAGGAAATG	3180
GGGAGTATGG CATCTTGAT GAACATACTG AAAAAGGACA AAATGCCTAT ACCCTATCAT	3240
TTAGAAAATT TAATTGGGAA TTTTGTGAGCA AAAATCTGAT TTCTCCTACC GAAGCGAACT	3300
AGAGAGATGG GCAAAGGAGA GATGGGCAAA GGAGTTATTG GCTTGGAGTT CGACTCAGAA	3360
GTATTGGTCA ACAAGGCTCC AACCCCTCAA TTGGCAAATG GTAAACAGC GACTTTCCTA	3420
ACCCAGTATG ATAGCAAGAC CTTGTTGTTT GCAGTAGATA AGGAAGATAT CGGACAGGAA	3480
ATTATTGGTA TAGCTAAAGG AAGCATCGAA AGTATGCATA ATCTTCCTGT AAATCTAGCA	3540
GGTGCCAGAG TTCCTGGCGG AGTAAATGGT AGCAAAGCAG CGGTGCATGA AGTTCCAGAA	3600
TTTACAGGGG GAGTTAATGG TACAGAGCCA GCTGTTTCATG AAATCGCAGA GTATAAGGGA	3660
TCTGATTGCG TTGTAACCTT TACTACAAAA AAAGATTATA CTTACAAAGC TCCTCTTGCT	3720
CAGCAGGCAC TTCCTGAAAC AGGAAACAAG GAGAGTGACC TCCTAGCTTC ACTAGGACTA	3780
ACAGCTTTCT TCCTTGGTCT GTTTACGCTA GGGAAAAAGA GAGAACAATA AGAGAAGAAT	3840
TCTAAACATT TGATTTTGTA AAAATGGCTC TTTGTCAACT GTAGTGGGT GAAGTCAGCT	3900
AAGCTCGAGA AAGGACAAAT TTTGTCCTTT CTTTTTTGAT ATTCAGAGCG ATAAAAATCC	3960
GTTTTTTGAA GTTTTCAAAG TTCCGAAAC CAAAGGCATT GCGCTTGATA AGTTTGATGA	4020
GATTATTGGT CGCTTCCAAT TTGGCGTTAG AATAGTGTAG TTGAAGGCCG TTGACGATTT	4080
TCTCTTTGTC CTTTAGAAAG GTTTTAAAGA CAGTCTGAAA AAGAGGATGA ACCTGCTTTA	4140
GATTGTCCCTC AATGAGTCCG AAAAATTCTT CCGGTTCCCTT ATTCTGAAAG TGAAACAGCA	4200
AGAGTTGATA GAGCTGATAG TGATGTTTCA AGTCTTGTGA ATAGCTCAAA AGCTTGTTTA	4260
AAATCTCTTT ATTGGTTAAA TGCATACGAA AAGTAGGGCG ATAAAAATGT TTATCGCTGA	4320
GTTTACG	4327

(2) INFORMATION FOR SEQ ID NO: 118:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 3521 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 118:

CTCTGGCCCT GCCACTCCAA CGTTTTGTCA GGGTGCTTTT TTCATAAAGG AGTTCTTATG	60
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843

TTAGATATCA AACGTATTTCG TACAGATTTT GAAGCTGTCTG CAGAAAAAT	120
GGTGTAGATG CTGCTGTCTT GAATGAAATG AAAGAAATCG ATGCTAAACG TCGTAACATC	180
TTGGTCAAGG TTGAACTCT CAAAGCAGAA CGTAACACAG TTTCTGCTGA GATTGCCCAA	240
GCTAAGCGCA ACAAGGAAAA TACAGATGAC AAGATTGCTG CCATGCAAAA TCTATCTGCT	300
GAGGTTAAAG CCTTGGATGC TGAATTGGCA GAAATCGATG CTAAATTGAC AGAATTTACA	360
ACGACTCTTC CAAATATCCC AGCTGACAGC GTTCCTGTTG GGGCTGACGA AGACGACAAT	420
GTGGAAGTTC GCCGTTGGGG TACTCCACGC GAGTTTGAAT TCGAACCTAA AGCTCACTGG	480
GATCTCGGTG AAGACCTTGG TATCCTTGAC TGGGAACGCG GTGGTAAGGT AACAGGCGCT	540
CGCTTCTCTT TCTATAAAGG CCTCGGTGCT CGTTTGGAAC GTGCTATCTA CAACTTTATG	600
TTGGATGAAC ATGGAAAAGA AGGCTATACT GAAGTCATCA CACCTTACAT AGTCAACCAT	660
GATTCTATGT TTGGTACTGG TCAGTATCCA AAATTTAAGG AAGATACTTT TGAACCTCAGC	720
GATACCAACT TTGTCTTGAT TCCAACCTGCT GAAGTTCCTC TGACAAACTA CTACCGTGAT	780
GAAATCTTAG ACGGCAAAGA TCTTCCAATC TACTTCACTG CCATGAGTCC GTCATTCGGT	840
TCTGAGGCTG GTTCTGCCGG TCGTGATACG CGTGGCTTGA TCCGTTTGCA CCAATTCAC	900
AAGGTTGAAA TGGTCAAATT TGCCAAACCA GAAGAATCTT ACGAAGAATT GAAAAAATG	960
ACAGCCAACG CTGAAAACAT TCTTCAAAAA CTCAACCTTC CATACCGTGT CGTTGCTCTC	1020
TCTACTGGAG ATATGGGCTT CTCAGCTGCG AAGACTTACG ACTTGGAAGT GTGGATTCCA	1080
GCACAAAACA ATTACCGTGA AATCTCAAGC TGTTCAAACA CAGAAGATTT CCAAGCCCCG	1140
CGTGCCCAAA TCCGTTACCG TGATGAAGCA GATGGCAAGG TGAAACTCCT TCATACCTTG	1200
AACGGTTCTG GACTTGACGT TGGACGTACA GTGGCTGCAA TTCTTGAAAA TTACCAAAAT	1260
GAAGATGGTT CTGTGACCAT CCCAGAAGCA CTTCGTCCAT ACATGGGTGG AGCTGAAGTC	1320
ATCAAACCAT AAAAAATAAG GTTTAGCTAT TTCTAGCTAG ACCTTTTTTC GTAACCAAAT	1380
CAGATAAGCA CCTAGTACAA AGAATAAAAT AGTTAGGCAT ATAATGGTTT CAGCCAATAC	1440
CAGGTAATCC AGAAATGGAA GTTTCAAAAT TCCCTGAGCC ATCTTGAGCG AGGTCGCTGT	1500
GATAATGGTT GGGAAAGTGA GGGCTGAGAA GGCTGGTTGA AAACCTTGTT TAAAAATGTT	1560
GGGCAGACGA GTTAAACAA AGAAAAAGAA GGATTGAGAA GCCAAAATCA TGACAATCAA	1620
GACCCAAGTC GGCAGGCTGG TTCCTCCTAC TCGAACTAGA GAAGCCAAGA GTAGAGAGAA	1680
AGGAGCACAG TAGATTCCTT CTTGTCCAAG CAAGGCTAGT GGGAGTGGAT GTTCTTTTAA	1740
ATCGCTATAA ATAAGGGGAT AGAGATAGAA GGTCAAGAGA AAACCAAAAC TCAAGGTCGC	1800

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ATAGGCAATT TCGATAATAC CTACCAGAGG ATAGGTCAAG GCAGCCACTG CTATCCCCAC	1860
ATAGAGAACC GTCCAGCTTG GAGTGGCATG AACCCCTCCGC CCTGGACAAG CAAACTTGAT	1920
GGTAAACCA GCAATCAAGG TCAAAATCCAA GAGAAATGAA AACCACCAA TCCCTTGTC	1980
TACCAAAGGA AGATAAGAGA ATACGCGAAA GACATAGGTC GATAAAATCA TCCCAGCCAT	2040
AGGAAAGGTT GCCATTCTG ACAAAGAGG GGGCTTGGTC AATTCTTGCT TGGTTCTTT	2100
CCAATTAAAG AGATGCAGAA TTAGAAAGTA AATCCATAAA ACCAAACCA TCAGACTAAA	2160
AAGATGGGAT AGAACCGCA ACGTATCTAA AATAAGATTT CCAGCTCCTG CCAAACCTAG	2220
CAAACAACCT GAAAATACTA AGGGGAGTTT TTTTCATCCTA ACCTCCAATA ATCATGTTAG	2280
TTTCAGTATA ACATAAAGC GCTTAAATGA GGATTTAAAA AAACGAGTCC GCTTATTTCA	2340
GACTTCATTT TACTCAGATA TGAATTAGGC ATAAGGTGC AATTCTGGAT TAATTGGTGT	2400
ATTAGCTAAG TTGTTGGCAT AGTTACAGAG GATTGCTAGG CTGACACCAA AAACCACATC	2460
CAAGGCATTT TGTGAGTGT AGCCAGCTTC TAAAACTCA GACAAGGCTT CATCTCCTAC	2520
ACGACCCTTG GTATTGATAA CTGCCAAGGT AAAGTTAGCT AGGGTATCCA ATTTAGGATC	2580
TGTTTCAATT GGAGTACGAT TGCGAAGAGC TTGAATCAAG TCATCATICA TCTGGATTG	2640
TTTGATGGAA AAGGCTGTGT GACCTGCGAC ACAGAAGGCA CAACCATGG TCACGGCTGC	2700
CGTGATTGTC ACCACTTCAC GCTCAACGGG TGTCAGGCTG TTGCGACGGT GGATAGATGA	2760
GACAATTTGG TAGGCTTCTA AAACAGTCGG GGCATTGGCC AAGAGACCGA TTAGGTTGGG	2820
AATATAGCCA TIGTTGTCTT TTTCTACTGT TTCAAGAATT TCTTTCATT CTGCTGGTGC	2880
TGACTCTACT GTATGGATAG TAAATGTTGT CATAAGATAC CTCTTTTCTT ATTATGACA	2940
CTAATATTAT TGGAAAATCT TATAAAATCC TGATTCCTAA GTTTATCTAA GATAAAGCTT	3000
TATCTCTCA TAAGATTTTC GTTGTATAT TAGTTTATCA CACTTCCAAT CACTTGTATA	3060
ATATATATTA TATATCAGGC TGATAAAAAA TATTTATAGG CAAAAAATC ACACGAGCTG	3120
TGTGATTCCA TTATTGTCA AAATACTTTT TAGTTTCAGC AATAACGACT GCGACAAGA	3180
CCAAGAGGGC AATCAAGTTT GGCAGAGCCA TCAAGGCGTT AACGATATCT GCGATAATCC	3240
AGACCATATC CAACTCGATA AATCCTCCTA ACAAGACCAT GAGCACAAAA ACCACACGGT	3300
AGAGCCAGAT AAAGCGAACC CCAAAGAGGA ACTCAAACA GCGTTCTCCG TAATAGTICC	3360
AACCTAGAAT CGTTGTAAAG GCAAAAAGTA CAAGGAAGAT GGTCAAGAGA GCAGGCCCAA	3420
AGTGTGAAAA GTTTGTTGAG AAAGCTGACT GAGTCAAGGC AACCCCATTC AAGTCACCGC	3480
TCCAACTCC AGTTACCAAG ATGGTCAAAC CAGTTAGAGT A	3521

(2) INFORMATION FOR SEQ ID NO: 119:

845

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1968 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 119:

AACCTGGGCA AGCAAGCTAA AAGCAATGGG ACCTGGAATC CTAATGGCAA CTGCCGCTGT	60
TGGAGGTTC CACATTGTAT CCTCAACTCA AGCTGGCGGT TCTTACGGTT GGTCTCTACT	120
TCTCTTGGTC ATCTTAGCCA ATGTCTTTAA ATATCCATTT TTCCGTTTIG GTGCTGAATA	180
CACAGCTGAT ACTGGAAAGA CTTTGGTTGA AGGTTATGCC GAAAAAGGAA AACTCTATCT	240
CTGGATTTTC TTTATCCTCA ATGTCTTTTC GGCTATGGTC AACACGGCTG GTGTTGCCAT	300
TCTGTGCTCA GCTATCATCG CCAGTGCCTT CCCAATGATT GGACTTAGCA TTACTCAGTG	360
GTCCCTCATT CTCGTTGCAA TCATTGGGC TATGCTACTC TTTGGAGGCT ACAAACTTTT	420
AGACGGCATG GTCAAATGGA TTATGTCTGC CTTAACCATT GCGACTGTTC TGCAGTTAT	480
CATTGCGGCG GTCAAGCATC CAGAATACAG TTCTGATTTT GTCGAGAAGA CACCTTGGCA	540
AATGGCAGCT CTGCCCTTCA TCGTCTCCCT CTTAGGATGG ATGCCGGCTC CTATTGAAAT	600
TTTCCAGCATC AATTCACTTT GGTGAGCTGA AAAGAGAAAG ACCGTCAACT TTAACACAGA	660
AGACGCTCTG TTTGACTTTA AACTGGTTA TATTGGAACA GCTATCCTAG CCGTCTTCTT	720
TGTGGCACTG GGAGCACTGA TTCAGTATCC TACAGGGCAG GCGGTTGAAG CTGCTTCAGC	780
CAAATACATC TCTCAATTCG TGGGCATGTA TGCTCTGTCT CTTGGCGAAT GGTCCCGTTA	840
CTTGATTACC TTTATTGCCT TCCTCTGTAT CTTTGGGAACA GTTATAACTG TTATCGATGG	900
CTATTCTCGC GTTAATCAGG AATCTCTCCG ACTGCTAATC AGTCAAAAAG AGGACAATCG	960
TAAATCTTTG AACATCTGGA TGACCATCAC TGCTATCATC GGTATCGTCA TTATCAAGTT	1020
CTTCGCTGGT CAGGTTTCAA CCATGCTCCG CTTTGCCATG ATTGGCTCTT TCCTGACAAC	1080
ACCTTTCTTT GCTCTTTTGA ATTACGCCTT GGTAACGCGT GAAAACAAAA ATCTTCCTTC	1140
TTGGCTCAAA CACCTTGCCA TTGCGGGATT GATTTTCCTC TTTGCTTCGC CATCTTCTTT	1200
ATCTACGCAC TCGCAATCGG AAAAGCAGGG TAAGGGACAA GCGCGAGATG AAGATAAGGT	1260
TTCATTTCAA GAGAAAATTC AGCAAATATT TCTATGATAA AAAGCATAAG AACAAAGTTT	1320
TGAAGACCTG AACTTATGCT TTTTACGTT CTAAAGACT GTTATACTC AAAAAACAGT	1380
TGAACAACCT CAACCACCTC TTATAAGAAC TTTATACTAT TCGAGAATCT CTTCAAACCA	1440

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CGTCAGCTCT ATCTGCAACC TCAAAGCTGT GCTTTGAGCA ACCTGCGACT AGCTTCCTAG	1500
TTTGCTCTTT GATTTTCATT GAGTATTAAT TCTCCTTTTC CAACTCATAC AAATCTGCCA	1560
TAATAGCTGC GACATGTTTG ATATCTTCCA GCATGCCTCG CATTTCAAAG TCAGCCAATA	1620
CAGGGAAGCC AAAGCGTTGA CTGTATTGCT TGGCTGTTAG GCAGTATTGG TTATTAAAGT	1680
TACGATTTCC TGACCCAACC ACACAAAAC ACTTACTAGC ATTGTTACCA TAGGCAATAA	1740
AATCTCCCAC CGGTGTCGTC AAAATCTCAA CATCTCCGTT ATCCACGCCA TTCCCACCTT	1800
CGAGATAGGT CGGCAAAAAA GCGACATAGG GATGGTCCAT TTCATAGAAA TTTTTCCTT	1860
CCTTGACCAA ATCCTTGATA TGAATCTTTT GAACCTCAAT CCCTTTGTAC TGGGACAAGA	1920
GATAGTCTTT CAAGCGCGTC ACAAACCTTT CAGTGTGCC ACTCAAGG	1968

(2) INFORMATION FOR SEQ ID NO: 120:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 7172 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 120:

CCGCATTTTT TATCACTAGA CTCGAGACAT CTTTGAGTG GCTCTTGCTC TCTGGTTTAA	60
TTTTCTTCCT TGCTCAAGGA CTCCTGCTAT TTCTCTTGGT CGTCCGACTC AAACATCAAT	120
TCGCTGAGAT TTATCCTCAA ATCAATAAAA AGATTGCTT CTACTATTTA GGGGTTCTCA	180
CCATTGATTT TCTATTTTTT GTTCTCTTAG CCTTCATTAG TTCTCAGCGT TTTTCATCTC	240
TTATGCCAAT CATCACTGCT TGCCATTCTA CTTTTTATTA TATGACAGCT GACTACCTAA	300
GAGAAACTA TCCAGACTTT TACGACAAAC ACATCTCTTT ATGGGAGTGT CTCTAAAGAA	360
AAGGAGGTTT TAGCATGAAA AAAATCATCT TCATCAAAAC CATTCAACTC CTTGTCATTG	420
ATGGAATCAT GCTGGCATTT TTGACATTTA AAAGGGGGCT TACTTGGGAC TGGATTTTGA	480
TTTATAGCGG TTGGCTCATT TTCTTTTCATC CTGTGCTATT GACCTATCTT TCAAACCAAC	540
TTTGTGACCA CTTTAGTTAA CTCTATTCCC AGATTAGACC GAGATTCTGG CGTTTTCCTT	600
TACAAATTCT CCTATGGGAT AGCCTGATGA TTCTCTCCTT GGTGTCTTTA AGTGATATTC	660
CACITTTTCCT TCAGGGAAC CTCCCTCATCC TAGGACATCT CATCCCTTCC TATCGCATCT	720
GCCAAAGCCT GAAAAGAGAC TTCCCCAAG CATATCAAGA ACCGATTCTT TTTTGGAGTA	780
TTTATGATA GATGAGAAAG ACCAAGCCGA CTGGGCTTGG TCTTTCTTAT CTCTTTTATG	840
TATCTAGGAT AATGGTAACA GGTCCATTAT TAACCAGCTC AACCTGCATA TCTGCTCCAA	900

847

AGATGCCTGT CTGAACGGGC ACTTCTTGCG CTAATTTTGT ATTGAAAGCA TCATAGAAGT	960
CTGATGCCAT ATCAGGTTTA GCTGCCCTTG TAAAGgCTGG ACGATTGCCT CTCTTAGTAT	1020
CCGCAAAGAG GGTAAGCTGA GAAATAGAGA GGATTCTCC TTCAATATCT TTGACAGACA	1080
GGTTCATCTT GCCTTCTGCG TCTGAAAAA TCCGCATATT GACCAGTTT CTCACAGCAT	1140
AGTCCAAATC TTCCTCTGG TCCTCTGGTC CAACACCAAC CAGCAATAAA AGTCCCTGAT	1200
TGATTTTCC CTGAATCTGG CCTTCTATAC TCACTTGGGC TTTTTAACC CGTTGGATAA	1260
TGATTTTCAT AATAGCCTTT CTAGTAAGAG CTAGGACAAC TAGCCGTTGG TCCGTTTGAC	1320
AGAGTAAACT TCTGGCACAC TCTTAATTT ATCGACAACC GTGGTCAGTG TAGAGAGGTT	1380
GGCAATACCG AAGgACACAT GGATATTAGC AAACCTCATA TCCTTGGTTG GTTGGGCATT	1440
GACCGTTGAA ATATTCTTGG TTGTATTGA AAGAACTGC AGTACATCGT TCAACAGTCC	1500
TGTACGGTTG AGACCGTAGA TATCGATATG GGCCATATAC TCCTTATTTG AGCTAGGGTA	1560
CTGGTCTTCC CATTCACAT CAAGGAGACG TTGCTCGTAG TTTTCTTGGG CACGCAGGTT	1620
CATACAGTCC ACACGGTGAA TAGCCACACC ACGACCCTTG GTAATGTAGC CAACAATATC	1680
GTCACCAGGC ACGGGGTAC AACACTTAGC AATCCGCACT AGGAGACCAG AAGCACCTTC	1740
AATAACCACT CCCCCTCAT GCTTGACCTT GAGGTTTCT TTATTTTCAA CCTTGACCTC	1800
GCCACCTTTG ACAAGCTCCT CTGCCTCAGC TTTGGCCTTG GCACGCTCTT CCTCACGGCG	1860
TTCTTTTCA GTCAGACGGT TAAAGACGGT AATCGCACCG ATTTCCCCAA AACCATGGC	1920
CGCAAAGAGG GAGTCTTCTG TCTGTAACT GGTCTTTGC AGAACTTGAT CCATGTGGCG	1980
CTTGTCATA AATTATTTG CCACATAGCC ATTTCTTGG AACTGAGCCA TCAGCATCTC	2040
ACGACCCTTG TTGACAGACA ATTCCTTATC TTGTTTTTA AAGAACTGC GAATCTTAT	2100
GCGCGCCTTG CTAGTCTGA CCATATTGAG CCAGTCACGG CTAGGTCCAA AGGAGTTCCG	2160
GTTGGCGATA ATTTCAACCT GATCCCCTGT CTTTAACCTG GTTGTCAGTG GAACCATGCG	2220
GCCATTGACC TTGGCACCAG TTGCTTTTTC ACCGACCTTG GTATGGATT CGTAGGCAAA	2280
ATCAATCGGT CCTGAATCTT TGGGAAGGA ACGGACAGCT CCATCTGGGG TAAAAACGTA	2340
AATCTCCTCA GCCAAATAGT TTTCCTTAAC AGAGTCCACA AATTCCTTAG CATCATCAGC	2400
CTGGTCTTGG AGCTCCATCA TCTCCTTGAT CCAGTTCATT CCAATAGCTG ATTCCTTGCT	2460
GTTAACTTGC CCTTTATAC CTTTCTTATA AGCCAGTGA GCCGCAACCC CGTACTCAGC	2520
CACCTCGTGC ATTTCCCTGG TTCGAATCTG GAATTCATC GGCCCTTTTG GTCCATAAAC	2580
AGTCGTATGG ATAGACTGAT AACCATTGGC CTGCGGTTG GCGATATAGT CTTGAAGCG	2640

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ACCTGGCATC GGTTCCTAAA ATTCATGCAC GTAACCAAGC ATGGCATAAA CATCACTTTG	2700
GGTATCTAAA ATACAACGAA TAGCAATCAG ATCATAGATT TCCTCAAACC GTTTTCTCTT	2760
GTCCTGCATT TTGCGGAAAA TTGAGTAAAT ATGCTTGGGA CGACCATAAA TCTTCCCTTT	2820
CAAGTGACGT TCTGTCGTAT ACTCCTCTAA TTTTGTGACT ACCTCATCCA CCAAGGCCTC	2880
ACGCTCCCTG CGCTTTTCCT TCATCATAIG GGTAATCTTG TAAAACTCCG TTGGATTGAG	2940
ATAACGAAAA GACAAGCTTT CTAATTCCTA TTTGACACTG GAAATCCCCA AACGATGGGC	3000
AAGCGGGGCA TAGATTTCCT TGGTTTCTTT GGAAATACGC TCCTGCTTGT CTTTTCGAAG	3060
ATGTTTCAGG GTCCGCATAT TGTGCAAGCG GTCAGACAGT TTGACCAAAA TAACGCGGAT	3120
GTCCTCAGAC ATGCCCATGA GCATCTTGCG ATGATTTTCC GCTAATTGCT CCTCGATCGA	3180
TTTGTACTCG ACCTTGCCAA GCTTGGTAAC TCCGTCAACA ATCATCCGCA CATCAGGACC	3240
AAACTCTCTT TCCAAATCGT CCAAAGTCGC ATCTGTATCT TCCACCACAT CATGCAAGAA	3300
TCCACAAGCT ACTGTTACAG CATCCAGCTT TAGCTTAGCT AAAATACCTG CCACTTGGAT	3360
AGGGTGAATG ATATAAGGCT CGCCTGATTT GCGATATTGA CCACTGTGGC ATTCAACAGC	3420
ATAGACCAAG GCCTTATGGA CAAAATGAAC ATCCTCTTCC GTTAAATATT CTTTGGTTAA	3480
AGCGACAAC TCTTCGCTG TTAAATTCAC TTCTTTCGGC ATCTCTACTC TCCAATTCTT	3540
CCTACCATT TATCACTTTT TTAAGAATAT GAAACTAGA TTGGAACAGA ATAAGAAAAA	3600
AATAATTCAA AATTGCTTGA TAATTCTGAA TTATTGGTCC GTAATATACT ACGAAGTTAG	3660
ATTTTAAACT TAGGTGATAG AAGGAGAGAT AGAAGAACGG AAACCATATT GTAACCCAAA	3720
GACTTTCTGA CTTCCCAAT TCCATTGAAG ATACGAAAGA TAAACGGTGG AACTCGTATC	3780
ACATACACTG GTACCTTGAC TGGATTTTGG AATTAAATACT AAATGAAAAT CAAAGAGCAA	3840
ACTAGGAAAC TAGCCGACAG TTACTCAAAG CACCGCTTTG AGGTTGCAGA TAAAGTTGAC	3900
GCGGTTTGAA GAGATTTTGG AAGAGTATAA AAATCCTCAA GATACTTTCT TCTATCCTTT	3960
AGTTTATAAG GAGAATACCT ATGAAAAAAA CTGCTATTTC TATCTTTGCT CTCCTAATGT	4020
TAGGAGTTTG CTGCCTGTTT CTATTCAGCC AGCAAAGCTA TAAAAACAG TCGTTCAATA	4080
CTATGCTAAC GACCAGAACC TGCCAGTAG GATAACTTAT AGTGAATATA GCCACAAATG	4140
AGAAGCCAAC TACGGTAGCA CTCTAAACAT CACGTCTATC AAACAAGCTA ATGACGGAGT	4200
TTATGCAACC TATGAAGGCG AATTGACACC TTTCCAATAT TGATAAATTG ATAACCAGCC	4260
TGTCCTTCATC TAGTCATGCT GGTTTTAAAG TTCATTTTAA ATCCTTACCT ATTCTCCCTA	4320
ACTGTGCTAT ACTTAATTTA TACTCAATGA AAATCAAAGA GCAAACCTAGA AAGCTAGCCG	4380
CAGGCTGTTT AAAGCACTGC TTTGAGGTTG CAGATAAAGT TGACGCGGTT TGAAGAGATT	4440

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TTCGAAGAGT ATTAGTACAT TCTTTGAGAT TGGAGCTAGT ATGAAAATCC ATAAAACCGT	4500
GAATCCTGTT GCCTATGAAA ATACCTATTA TCTAGAAGGC GAAAAGCACC TCATCGTCGT	4560
CGATCCTGGT AGTCATTGGG AAGCCATTCCG TCAGACAATC GAGAAGATCA ACAAACCGAT	4620
CTGTGCTATT CTCTTGACCC ACGCCCATTA TGACCATATC ATGAGTCTGG ACTTGGTTCCG	4680
CGAGACGTTT GGCAATCCTC CTGTCTATAT CGCAGAGAGC GAAGCCAGCT GGCTCTACAC	4740
TCCTGTGCGAT AATCTCTCCG GTCTCCCTCG CCACGATGAT ATGGCAGATG TGGTCACAAA	4800
ACCTGCAGAA CACACCTTTG TCTTTCACGA AGAATACCAA CTAGAGGAAT TTCGTTTAA	4860
GGTTCTACCG ACCCCAGGGC ACTCTATCGG TGGTGTTCCT CTAGTCTTTC CTGATGCTCA	4920
TCTAGTCTTG ACGGGAGATG CTCTATTCCG CGAAACTATC GGACGGACCG ACCTTCCGAC	4980
TGGTAGCATG GAGCAACTCC TTCATAGTAT CCAGACCCAA CTCTTCACCC TACCAAACTA	5040
CGATGTCTAT CCAGGACATG GTCCAGCTAC TACTATCGCT CACGAAAAGG CCTTCAATCC	5100
CTTTTCTAG CAAGATGATG ACAATCGAAA TTTAAGTAAA CTATCCAGCA AATCTTTCTA	5160
TTACAAAAGG CATCCTATCA AGGTTTTCAC ACATGATTGG ATGCCCTTTT TCTGATGACT	5220
AGATTTTTTG CATTACCAA TAATCACGCG CTCCTCTGGT GAACGCCACA TTCCGTCTCC	5280
TTCTTTGACA TCATAGGTTG TAAAGAAATC GTCGAACTTT GGTAAGTGCA CATTGACACG	5340
GAGTTTGGCT GGTGCGTGCA CATCGACGCT AGCCAAAAGT TTCATAAATT CTGGTCGACC	5400
TTTCATGCGC CAGATGCGAC CGAAGTTGTA GAAGAACTCT TCTGCTGAGA AGTCTGCTTC	5460
TCTCTTAGCT GCTTCAACCG CTGCTGCGAT TCCTCCCAAG TCAGCCACGT TTTCTGATAC	5520
AGTCAATTTA CCGTTAATGG TTGCTCCATA AGAATCCTGT CCATCAAAAT GGTCAATGAC	5580
TTTTTGTGTT TTCTCCTTGA AGGCAGCATA GTCGCTCTCT GTCCACCAAT CCTTGAGGCT	5640
ACCATTTTCG TCAAAGGAAG CCCCCTTAGT ATCAAAGGCG TGGGAAATTT CATGGGCAAT	5700
CACTGCCCCA ATACCACCGT AGTTAGCAGA AGATGACTGA TGCAAGTCAT AGAAAGGCGC	5760
CTGTAAAATG GCCGCTGGAA AGACAATCAG GTTCTTCTGA GGATTGTAGT AGGCATTGAC	5820
CATATGAGCA GGCATGCCCC ATTCCCTATA ATCTACAGGC TGGTTCCACT TACTCCAACT	5880
GTGCTTGATT TCCACACGCG CAAAGGCTAG AGCATTCTCA AAAAGACTGG CAGTTTCATT	5940
CACTACCTTA TCCTTGTAAC GTGCAGGCAA TTCTTCTGGA TAGCCAATAT AAGGTTTGAT	6000
CACATTGAGC TTCACGATAG CTTGTTTACA GGTTCCTGGA GTGAGCCAGT CATTCTTAAG	6060
CAGACGCTCC TTATAAACAT CAATCATGGT TGCCACTTTT TTCTCCACAT CCGCCTTGGC	6120
TTCTGGAGAG AACTTCTCAC GGGCGTACCA AAGACCCAGG GCTTGCTTGA AAGGTTCTTG	6180

850

TGCTAGATGA TAAGCTGCTT TGACCTTATC TTTTGCCTCT GGAAGTCCAG AAAGGGCACG	6240
GCTGTAGGCA CCAGACAAAA CACGGATATC CTCTGTTAAA TAGCTGGTTG AAAGATTGAC	6300
AACACTCAAA ATCAAGGTTG CTTTAAGGAG AGACCAGGCT TCCTCACTGT AGAATTGCTC	6360
TGCTGCTTGC CAGAAACGTT CCTCGTCTAC AATAACCTTG TCTGGTAATT GCCCAATAAC	6420
TGCTTTGAAG AAGTCATCCA AAGGTAGGGC AGGCGCGAAT TTCTTGAAAT CTTCGTAAGA	6480
ATATGGATGA TAGAGTTTAG CATATTCTGA ACTTTCTTCA TTAGAGAGCA CCACTGCCGC	6540
AACTCGGCGG TCCAATTCAA GTCTTTTTTC TAGCAAGTCT TCAATTTCCT CATCAGAGAA	6600
ATCATAAGCC TTGAGGAGAT TTGCGCTGCT TTCTTTCCAA AGAGTCAAGA GCTCTTCGCG	6660
CTGAGGATGT TCTTCIGCAT AGTAGGTCGT ATCTGGCAAG ATTGTGCTTG GAGCGCTAGC	6720
CCATAGAACA TTGATTTCTAG CATCCATAAA GTCTGGCGAT ACACCAAAAAG GAAGGAAGTT	6780
TGGTTTTCTT GCAAGCTCAA ACTCTGCTAG TTTAGCTGTA AAATCCGCAA AAGTCTCCAA	6840
TTCTTGGAAT TCTTTAAGGA GTGGTAAGAC AGGTGTGATA CCGTCAGCTT CTCTCTTGTC	6900
AAAATCACGA ACTAGGCGGT GGTATTTGAC AAAGTTTCC AAGATAGCAT CCTCAGGCAC	6960
TTCTTCACCT GCTAACCCT TGTCTGTTGT CGCCAGCATC AGGTCTTCAA TTTCCTGGTC	7020
TAAATCAACA AAACCTCCTG TTTGAGACTT ATCTGCTGGG ATTTTCAGCTG TCTGTTGCCA	7080
TTCTCCATTG ATAGCATCAT AAAAATCATC TTGATAACGT GTCATCTTGT TCTCGCTTTC	7140
ATTTGTATTT GCATTTATCT TAACAAAAAT CG	7172

(2) INFORMATION FOR SEQ ID NO: 121:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 4518 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 121:

CGGGAAGTTA TGCGATCTAG ACTTCGTTCC TGTACAGCTA CTTTCTCAGG TGGTCTTGTT	60
GTTTGTATGA GTTTGTTTAG AGAGGATCTT TCTATGTCTT TCTTTCTTAT TTTTGTTTTA	120
TATGCTTTTC TGATTCTTCA TCTAATTTAT GGTATTTC AACTAAAAAG GAAATACCGA	180
GTAGATGAAT AGCAAGGTTT TAGGTCTTCA GATTGATTTT TAGCACTCTT GATAAAAGAG	240
TGCTAATTTT TTGAGTTTTT GTCTTGACAT TCTCTTCTAA GGGTGTATAA TAGAATCATG	300
AGTTAGCACT TGGATGCATT GAGTGCTAAT TGATCAGACA GAGAGGAGTG ATGAGATGGT	360
TACAGAGCGT CAGCAGGATA TTTTAAATCT GATTATTGAC ATCTTTACCA AAACGCACGA	420

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ACCTGTCGGA TCAAAAGCCT TGCAAGAGTC TATTAACTCT AGCAGTGCAA CCATTCGTAA	480
TGACATGGCG GAACTAGAAA AACAGGGTT GCTTGACAAG GCTCATACTT CAAGTGGTCG	540
GATGCCAAGT GTTGCTGGTT TTCAGTACTA TGTGAAACAC TCACTGGATT TTGACCGGCT	600
GGCTGAAAAAT GAGGTATATG AGATTGTCAA AGCCTTTGAT CAGGAATTCT TCAAATTGGA	660
GGATATTCTG CAAGAGGCTG CTAACCTACT AACAGACCTG AGTGGCTGTA CGGTAGTGGC	720
ACTGGATGTT GAGCCGAGCA GGCAACGTTT GACAGCCTTT GATATCGTTG TTTTGGGGCA	780
ACATACAGCC TTGGCGGTAT TTACCCTAGA CGAGTCGCGA ACGGTTACTA GTCAGTTTCT	840
GATTCCAAGG AACTTCTTGC AGGAGGATTT GCTGAAACTG AAGAGCATCA TTCAGGAACG	900
TTTCCTCGGT CACACCGTTT TAGATATTCA CTACAAGATT CGGACGGAGA TTCGCAGAT	960
TATCCAGCGT TACTTTACAA CAACGGATAA TGTCATCGAT CTCTTTGAAC ACATCTTTAA	1020
GGAAATGTTT AACGAAAACA TTGTGATGGC GGGCAAGGTC CATCTCTTGA ATTTTGCCAA	1080
TCTAGCAGCC TATCAGTTCT TTGACCAACC GCAAAAGGTG GCCTTGAGGA TTCGTGAGGG	1140
GTTGCGTGAG GATCAGATGC AAAATGTTTCG TGTGTCAGAC GGTCAAGAGT CCTGTTTAGC	1200
TGACCTAGCG GTAATCAGTA GTAAGTTCCT CATTCCTTAT CGGGGAGTTG GAATTCCTAGC	1260
CATTATCGGT CCAGTTAATC TGGATTACCA ACAGCTAATC AATCAAGTCA ATGTGGTCAA	1320
CCGTGTTTTG ACCATGAAGT TGACAGATTTT TTACCGCTAC CTCAGCAGTA ATCATTACGA	1380
AGTACATTAA GATTGAAATC ATTAAGAGGAG GCGAACATGG CCCAAGATAT AAAAAATGAA	1440
GAAGTAGAAG AAGTTCAAGA AGAGGAAGTT GTGAAAACAG CTGAAGAAAC AACTCCTGAA	1500
AAGTCTGAGT TGGACTTGGC AAATGAACGT GCAGATGAGT TCGAAAACAA ATATCTTCGC	1560
GCTCATGCAG AAATGCAAAA TATCCAACGC CGTGCCAATG AAGAACGTCA AAAGTTGCAA	1620
CGTTATCGTA GCCAGGACTT GGCAAAAGCA ATCTTACCAT CTCTTGACAA CCTTGAGCGT	1680
GCACTTGCAG TTGAAGGTTT GACAGATGAT GTGAAGAAGG GCTTGGGGAT GGTGCAAGAA	1740
AGCTTGATTC ACGCTTTGAA AGAAGAAGGA ATTGAAGAAA TCGCAGCAGA TGGCGAATTT	1800
GACCATAACT ACCATATGGC CATCCAACT CTCCCAGCAG ACGATGAACA CCCAGTAGAT	1860
ACCATCGCTC AAGTCTTTCA AAAAGGCTAC AAAGTCCATG ACCGCATCCT ACGCCCAGCA	1920
ATGGTAGTGG TGTATAACTA AGATATAAAG CCCGTAAAAA GCTCGCAGTA AAAATAGGAG	1980
ATTGACGAAG TGTTCGATGA ACACAAGAAA ATCTATCTTT TTTACTCAGA GCTTAGGGCG	2040
TGTTTCGATTC GGCAATTCTG ACGGTAGCTA AAGCAACTCG TCAGAAAACG GCAATCGCTA	2100
TGGCGTTTGC CTAGCTTCCT TACTAACTCG TCGTCGAAAT AAAATCGATT TCGACTCCTC	2160

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GTGTCGCAAT TTACATAATA GAAAACTTGT CCGAAACGAC AATAAACTAT GAAGAAAGAT	2220		
AAAAATATGTT TGGCTTTGTA ATAGTGAGCG AAGCGAACCA AACACGATAC TCTTCGCCGT	2280		
GGCGCTATTT GCGCAAATTT TGAGACCTTA GGCTCAAAGT TTAGTCAAAG AGATTGACGA	2340		
AGTCAAGCTC TGACGGCGTC GCCACTGTCT CCACTTAAGA AGAGTATCAA AAAGAAAAAT	2400		
AGAAAAATTA CTAACAAGGA GAAAAACACA TGTCTAAAAT TATCGGTATT GACTTAGGTA	2460		
CAACAAACTC AGCAGTTGCA GTTCTTGAAG GAACTGAAAG CAAAATCATC GCAAACCCAG	2520		
AAGGAAACCG CACAACCTCA TCTGTAGTCT CATTCAAAAA CGGAGAAATC ATCGTTGGTG	2580		
ATGCTGCAAA ACGTCAAGCA GTTACAAACC CAGATACAGT TATCTCTATC AAATCTAAGA	2640		
TGGGAACCTC TGAAAAAGTT TCTGCAAATG GAAAAGAATA CACTCCACAA GAAATCTCAG	2700		
CTATGATCCT TCAATACTTG AAAGGCTACG CTGAAGACTA CCTTGGTGAG AAAGTAACCA	2760		
AAGCTGTAT CACAGTCCG GCTTACTTCA ACGACGCTCA ACGTCAAGCA ACAAAGACG	2820		
CTGGTAAAA TGCTGGTCTT GAAGTAGAAC GTATTGTTAA CGAACCAACT GCAGCAGCTC	2880		
TTGCTTATGG TTTGGACAAG ACTGACAAAG AAGAAAAAAT CTTGGTATTT GACCTTGGTG	2940		
GTGGTACATT CGACGTCCTT ATCCTTGAAT TGGGTGACGG TGTCTTCGAC GTATTGTCAA	3000		
CTGCAGGGGA CAACAACTT GGTGGTGACG ACTTTGACCA AAAAATCATT GACCACTTGG	3060		
TAGCAGAATT CAAGAAAGAA AACGGTATCG ACTTGTCTAC TGACAAGATG GCAATGCAAC	3120		
GTTTGAAAGA TGCGGCTGAA AAAGCGAAGA AAGACCTTTC TGGTGTAAC TCAACACAAA	3180		
TCAGCTTGCC ATTTATCACT GCAGGTGAGG CTGGACCTCT TCACTTGGA ATGACTTTGA	3240		
CTCGTGCGAA ATTTGACGAT TTGACTCGTG ACCTTGTTGA ACGTACAAA GTTCCAGTTC	3300		
GTCAAGCCCT TTCAGATGCA GGTTTGAGCT TGTGAGAAAT CGACGAAGTT ATCCTTGTGTG	3360		
GTGGTTCAAC TCGTATCCCT GCCGTGTGTG AAGCTGTTAA AGCTGAAACT GGTAAAGAAC	3420		
CAACAAATC AGTAAACCCT GATGAAGTAG TTGCTATGGG TCGGGCTATC CAAGGTGGTG	3480		
TGATTACTGG TGATGTCAAG GACGTTGTCC TTCTTGATGT AACGCCATTG TCACTTGGA	3540		
TCGAAACAAT GGGTGGAGTA TTACAAAAC TTATCGATCG CAACACTACA ATCCCAACAT	3600		
CTAAATCACA AGTCTTCTCA ACAGCAGCAG ACAACCAACC AGCCGTTGAT ATCCACGTTT	3660		
TTCAAGGTGA ACGCCCAATG GCAGCAGATA ACAAGACTCT TGGACGCTTC CAATTGACTG	3720		
ATATCCCAGC TGCACCTCGT GGAATTCCTC AAATCGAAGT AACATTTGAC ATCGACAAGA	3780		
ACGGTATCGT GTCTGTTAAG GCCAAAGACC TTGGAACCTA AAAAGAACAA ACTATTGTCA	3840		
TCCAATCGAA CTCAGGTTTG ACTGACGAAG AAATCGACCG CATGATGAAA GATGCAGAAG	3900		
CAACCGCTGA AGCCGATAAG AAACGTAAAG AAGAAGTAGA CCTTCGTAAT GAAGTAGACC	3960		

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AAGCAATCTT TGC GACTGAA AAGACAATCA AGGAAACTGA AGGTAAAGGC TTCGACGCAG	4020
AACGTGACGC TGCCCAAGCT GCCCTTGATG ACCTTAAGAA AGCTCAAGAA GACAACAAC	4080
TGGACGACAT GAAAACAAAA CTTGAAGCAT TGAACGAAAA AGCTCAAGGA CTTGCTGTTA	4140
AACTCTACGA ACAAGCCGCA GCAGCGCAAC AAGCTCAAGA AGGAGCAGAA GGCGCACAA	4200
CAACAGGGAA CGCAGGCGAT GACGTCGTAG ACGGAGAGTT TACGGAAGAA TAAGATGAGT	4260
GTATTGGATG AAGAGTATCT AAAAAATACA CGAAAAGTTT ATAATGATTT TTGTAATCAA	4320
GCTGATAACT ATAGAACATC AAAAGATTTT ATTGATAATA TTCCAATAGA ATATTTAGCT	4380
AGATATAGAG AATTATATTA GCTGAACATG ATAGTTGTAT CAAAAATGAT GAAGCGGTAA	4440
GGAATTTTGT TACCTCAGTA TTGTTGTCTG CATTTGTATC GGCGATGCTA CCGTATCTGA	4500
CGAACGTTCA GCTTATAT	4518

(2) INFORMATION FOR SEQ ID NO: 122:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 8145 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 122:

TGCTATTTTC GATTCCTTG GCGTTTTGA TTGCCTTTC CTGCAAGTC CATGGAAGC	60
CCCTCCATTA TCTGATTAAC ATTTACATCT GGGTTATGCG AGGAACCCCC TTACTCTTGC	120
AACTGATTTT TATCTATTAT GTGCTCCCAA GTATTGGGAT TCGTTTAGAC CGCCTTCCTG	180
CAGCTATTAT TGCTTTGTT CTCAACTATG CAGCTTACTT TGCAGAAATT TTCCGTGGGG	240
GAATTGACAC TATTCCAAGA GGACAGTATG AGGCCGCCAA GGTCTTGAAG TTTAGCCCTT	300
TTGACAGAGT GCGCTATATT ATCTTGCCCC AAGTGACCAA GATCGTTCTT CCTAGTGTCT	360
TTAATGAAGT TATGAGTTTG GTCAAGGATA CTTCTTTGGT CTATGCTCTC GGAATTTTCA	420
ACCTTATCTT GGCTAGTCGA ACAGCTGCTA ACCGCGATGC TAGTCTAGTT CCTATGTTCT	480
TGGCAGGAGC CATTTATTG ATTTTGATTG GGATTGTGAC AATTATTTCC AAAAAAGTTG	540
AGAAGAAGTA TAGTTATTAT AGATAGGAGG CTGCCATGTT AGAATTACGA AATATCAATA	600
AAGTCTTTGG ACACAAACAA ATCCTGTCTA ATTTAGTCT AAGTATTCCT GAAAAGCAAA	660
TCCTGGCTAT CGTTGGACCT TCTGGTGAG GTAAGACAAC TCTTTTACGT ATGCTTGCAG	720
GTCTTGAAAC CATTGATTCA GGGCAAATCT TTTATAATGG ACAACCTTTA GAGCTGGATG	780

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AATTGCAGAA GCGCAATCTA CTGGGATTTG TCTTCCAAGA TTTTCAACTA TTTCTCATC	840
TATCAGTTCT GGAAATTTG ACTTTATCGC CTGTGAAGAC CATGGGAATG AAGCAGGAAG	900
AGGCTGAGAA GAAGGCGAGT GGACTCTTGG AACAGTTAGG ACTAGGAGGA CACGCAGAGG	960
CCTATCCTTT CTCACTATCT GGTGGGCAAA AGCAGCGGGT GGCTTTGGCG CGTGCTATGA	1020
TGATTGACCC AGAAATCATT GGCTACGATG AACCAACTTC TGCCCTGGAT CCAGAATTAC	1080
GTTTGGAAGT GGAGAAGCTA ATCTTGCAAA ATAGGGAAC TGGGATGACC CAGATTGTGG	1140
TTACCCATGA TTTCAGTTT GCTGAAAATA TCGCAGATGT ATTATTGAAA GTAGAACCTA	1200
AATAGGAGGA AAAATGGATG AAAAAATGGA TGCTTGATT AGTCAGTCTG ATGACTGCTT	1260
TGTTCTTAGT AGCTTGTTGG AAAAAATCTA GCGAACTAG TGGAGATAAT TGGTCAAAGT	1320
ACCAGTCTAA CAAGTCTATT ACTATTGGAT TTGATAGTAC TTTTGTCCA ATGGGATTTG	1380
CTCAGAAAAG TGCTTCTTAT GCAGGATTTG ATATTGATTT AGCTACAGCT GTTTTGTGAA	1440
AATACGGAAT CACGGTAAAT TGGCAACCGA TTGATTGGGA TTTGAAAGAA GCTGAATTGA	1500
CAAAAGGAAC GATTGATCTG ATTTGGAATG GCTATCCGC TACAGACGAA CGCCGTGAAA	1560
AGGTGGCTTT CAGTAACCA TATATGAAGA ATGAGCAGGT ATTGCTTACG AAGAAATCAT	1620
CTGGTATCAC GACTGCAAAG GATATGACTG GAAAGACATT AGGAGCTCAA GCTGGTTCAT	1680
CTGGTTATGC GGACTTTGAA GCAAAATCCAG AAATTTTGAA GAATATTGTC GCTAATAAGG	1740
AAGCGAATCA ATACCAAACC TTAAATGAAG CCTTGATTGA TTTGAAAAAC GATCGAATTG	1800
ATGGTCTATT GATTGACCGT GTCTATGCAA ACTATTATTT AGAAGCAGAA GGTGTTTTAA	1860
ACGATTATAA TGTCTTTACA GTTGGACTAG AAACAGAAGC TTTTGCGGTT GGAGCCCGTA	1920
AGGAAGATAC AAACCTGGTT AAGAAGATAA ATGAAGCTTT TTCTAGTCTT TACAAGGACG	1980
GCAAGTTCCA AGAAATCAGC CAAAAATGGT TTGGAGAAGA TGTAGCAACC AAAGAAGTAA	2040
AAGAAGGACA GTAAGATAAA ATAGTGGCTG AAACGCGTT TTGATTAGCA AAACGTAGTT	2100
TTTTTTGTAA TCTAGGAAAA CGATAATAGC GATTGAATAT GGATAATTGA ATATGGAATA	2160
GCCCACTGTG ATTTCTAAAA CATTGTAAAA AATTGATTTG ACTTCCAAAA TTAAAAATGT	2220
CTGTAATGAA ATACTGATGT AACTGTTTTA GGAACAATAA AACGCATAAT ATCAAGGTTT	2280
TTGCACCTTA CATTATGCGT TTTTGTGATT TTAAGACTTG TTAGCTGATT TTTTACAATC	2340
CTGCGAAATC TTTGATTCT TGTGCTGACA TTGAAGAGTC GCAACGGACG TTGATTTGTC	2400
CATCTGTAAT ATGAACAAAA CCTGGTACAG TTGGGATTCC ATAGCGTGAG CGGAATGCTT	2460
GCAAATCATT GAGTTGGCTT GGTCTTCAC TATTGATGAA GTAAATGTGA CCTTTGGTTT	2520
CAGCTACGAC ACCTGACAAT GTACCTGCAA ATTTACGGCA GTAAGGGCAA GTTTTGCAGC	2580

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CGATAAAGAA GGTTCAGTT TCTTTTAT CAAGAGCTTC TTGCGCACGC ACAACTGTAG	2640
TGACTTCAAG GTCITTGATG TTATCTAAAA ATTGTTCCAT GAGATTACCT CGCTTTCATT	2700
GATAAGTCTA GTATGCCATA AAGTTTCTAA AATTGCTTAG ATTTGATACG AAAAAAGATG	2760
AGGTTGGTTG GTCTCATCTT TTATAGGTCT TTATTTTACA AATGCATPGA TTTCTGCTTC	2820
GATGTTAGCA ATCTTAGCTT GTGATTCTTC GTTGGTTTCC CCTACAACGT CAATGTAGAA	2880
CTTGATTTTT GGTCTGTAC CTGAAGGGCG AACGGCAATC CATGAACCGT CAGCAAGTGT	2940
GTATTTCAAC ACATCACTTG GAGGAGTTGT CAAGTTTGTG ACAGTACCGT CAGCAACAGT	3000
AGCAGTTTGT GCCTTGAAGT CTTCTACGAC AGTGATAGCT GTTGCCTTCC ATTCTGTTGG	3060
AGCATTGTTG CGGAATTTAG CCATAATCGC TTTGATTGTG TCAGCACCAT CGACACCTGA	3120
AAGAGTAACA GAGATTGTTT TTTCTGCGTA GTAGCCATAT TCTTTATAGA TTTCTTCGAT	3180
ACCGTCAGCA AGTGTCAAAC CACGAGAACG GTAGTAGGCA GCAAGTTCAG CAACTACAAG	3240
AACGGCTTGG ATGGCATCTT TATCACGTAC AAATGGTTTA ATCAAGTAAC CGAAGCTTTC	3300
TTCAAATCCC ATCATGTAAG TGTGGTTGTG TTTTCTTCG AATTCTTGA TTTTTCAGC	3360
GATAAATTTG AAACCTGTCA AGACGTTGAA CATAGTTGCG CCGTAGCTTT CAGCAATCTT	3420
CGTTACCAAG TCAGTTGAAA CGATAGATTG GCAGAGAGCG GCATTTTCAG GAAGAGTTCC	3480
AGCGTTTTTG TGAGCTTCCA AGATGTATTT AGCCATGATA GCACCGATTG GGTACCTGA	3540
AAGGTTGAGG TAGCTACCAT CTTTTGAAG AACTTCAACA CCAACACGGT CAGCGTCTGG	3600
GTCAGTTGCG ACAAGAACAT CTGCACCAAC TTGACGACCA AGTTCTTCAG CAAGGGCAAA	3660
GGCTGCTTGG CTTTCTGGGT TTGGAGATGT TACAGTTGAA AAGTCTGGGT CAGCAGTTGC	3720
TTGCGCTTCA ACAACTTGAA CAGAGTCAAA TCCTGCTTGG GCAAGAGCAC GACGAGCCAA	3780
CATTTACCA GTACCATGAA GTGGTGTGTA GACAATCTTC ATGTCTTTAC CAAATCTTC	3840
AATCAAGGCT GGGTTGATGT TTATGTCCTT AACCTCTTTA AGGTATTCTA TGTCAACAGC	3900
TTGCGCGATA ACTTCAATCA AGCCAGAAGC TTTTTCAGTT TCCACATCAG CAACTTCAAC	3960
TGCAAATGGG TTTTCGATTG CACGGATATA AGTAGTCAAA GCGTCCGCAT CGTGTGGAGG	4020
CATTTGTCCA CCGTCTTCAC CGTAAACCTT GTAACCGTTA AATGGAGCAG GGTGTGGCT	4080
GGCTGTGACC ATGATACCTG CGAAACAGTT GAGATGACGA ACTGCAAATG ATAGTTCTGG	4140
AGTCGGACGA AGGCTTTCAA ATACGTAAGA TTTGATGCCG TGTTTAGCAA GAACTGCCGC	4200
AGATTCAAAG GCAAACCTAG GTGAGAAGTG ACGGCTATCG TAGGCAATTG CTACACCGCG	4260
TTCTTTCTCG TTTCCACCTT TTGACTCAAT CAAACGAGCC AATCCTTCAG TAGCTTGCGG	4320

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AACAACGTAG	ATGTTGATAC	GGTTTGATACC	AGCACCAACC	AAGCCACGCA TACCTGCAGT 4380
ACCAAATTC	AGATTGTAT	AGAAGGCATC	TTCCTTAGTT	TTTTCGTCCA TATTTTCCAA 4440
ATCTTGACGA	AGGTAGTCAC	GAAGCTCCAC	AAATCAACC	CATTCTGGT AATTTTCTTG 4500
GTAAGACATT	CAAATCTCC	TTTATTTT	AAACATTAA	TCAGTTAAT TATATCATTT 4560
TTTTTAGTTT	TAGTAAAACC	TTATCTGCTT	CGAACATCTC	TTCAAACCAG GTCAGATTGA 4620
ATTTTGGGGT	TATATGATGT	TGAGGCTAGG	AAAAATTCAA	TTTCAGTAAA AAAAGTAAGT 4680
CTTCTCATAA	CAAAACATTG	ATATAGTTAC	TTAGTTTAA	ACAAGCATAT TATAATAAAG 4740
CTATGGCATA	TAGTACTGAT	TTTAAACAGC	GAGCATTAGA	TTACATCAAA GAGGGGCACA 4800
GCCATGTGCA	GGCAGCCAAG	TTTTTTGGTG	TTGGCGTCAG	AACTCTCTTC ACGTGGGAAA 4860
AGAAAGACGT	GAACAAGAAC	ACATAGAGAG	GAAAAAGCGA	GTCGTCAAAA ACCGAAAGAT 4920
TCCTTTAGAG	GAATTGAAAG	CCTTTGTAGA	GGCTCATCCA	GATGCTTTTT TACGGGAAAT 4980
TGCGGCACAT	TTTGATTGTG	CTGTTCTTTC	AGTATGGGCA	GCTTTAAAGC AGATTAAGGT 5040
CACTTTAAAA	AAAGATGACG	AGCTTTAAGG	AACAAGACCC	AGAAAAGTAG CCTTATTTCT 5100
TAAGAATTTT	AATAGTTTAA	AGCACCTAGC	ACCTGTTTAT	ATTGATGAAA CAGGAATCGA 5160
CCGCTATCTC	TATCGTCCTT	ATGCAGGGGC	TCCTAGAGGG	GAGAAAGTCT ATGAAAAGAT 5220
TAGCGGACGT	CGTTTTGAGC	GAACCTCAAT	TGTTGCAGGA	CAAGTAGACG GAGAGTTTAT 5280
AGCTCCCATG	ATTTACAAGA	AAAGCATGAC	AAGCGATTTT	TTTGTGGAGT GGTTCAAAAC 5340
GCAACTCCTA	CCTGCTTTGA	AGACACCTCA	TGTTATTGTC	ATGGGCAATG CTGGTTTTC A 5400
TCCCAAGAAC	ATTTGGGATG	AACTCTGCAT	CCAAGATAAA	CACTTTTTCT TACCTCTACC 5460
ACCTTATTCA	CCGGATTGGA	ATCCTATTGA	GCAAGCTTGG	GCTATCTTGA AAAAGAAAGT 5520
GACGGATGTA	TTAAGGGAAG	TTCCAACAT	TTTGAATGT	TTGGAATGCT TTTTAAAAAC 5580
TAGATGACTA	TAACGGTTCT	AAAGGAACCT	ATCGAGTAGT	CATTAAAACT AAGGATACTG 5640
CTGGTTAAGA	GAAGACGGA	TACAATCAAA	CCATTACCG	TGTAGCCGAA ATCGTTCAGA 5700
ATGAAGACTT	GTATCAGAAT	GAAGACTTGT	ATAAGAAAGG	TTTGAATGTT GAACTTGCGC 5760
ACCAACAAAT	TAAGGGATTT	TTTGAAGCAG	AGTTTAAAAA	TCGTATTAAT GGAGTTCTTA 5820
ATACTAAAA	AAAAAATAGT	ACATTAAATC	GTGTAAATAA	AAAACTATA CACCAGAGCA 5880
ACAAAAACTC	CATGATCAAT	TTGAAGCAGA	AGCAACGGAA	GATGCTAAAA AACAGGCGA 5940
TATTGTGTTG	AATGTTGACC	AGGATTTTCAT	GAGCATATCT	AAGTCTAATA AAAGTGGTTC 6000
AGACTGGAAG	AAAACTTTCA	CAGTGAGGAT	AACCAATAGG	CTAGCAAATG ACTTGAATAA 6060
TGTCTTGAAA	CAGGTTGATA	AAGATACTCC	TAATACCCCA	ACTTGGCTAA ACTCAGCTGC 6120

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TTCTAAAGCT AAAGATGATG ACAGAGTATA TAACTACTG AAGACTCTTA TACCAGGAGA	6180
AAATTACCTA TCATGTTAAG GATAATCAGC TAGAAGTAGA AACAGATAAA TACACATATA	6240
CTGCCGCTAG AAATGGTAGT AAGGAAGTTG GTATTCAAGA GTCAGATATA GCAGCAACTC	6300
TAAGTGCCGA TGAATATAAT TCTAATCGCC AAAC'TTTTGA GAGAGAATAC AAATACAAAA	6360
GCAAAATGCCC TTAATAATGG TTGGGCTAGA TCTGGTTCCTG AAGAGTTCAG AAAGTTCTCC	6420
CACTTTGTAG GGGTAGACAA AGGGATTGTG CGAACGAATG TACTGACTGG TAAAAAATA	6480
TCTGATAAGA TTAGGAAAGA AGTGGGCTCT GGAGATAGCA AACTAGGAAA AGGCGGCTAT	6540
TTCTCTACTG GGGATGTTCT ATTAGGAAAA GATGTTGTTT CTTATACCGT ACAAGTATTT	6600
TCAGAGAATA ATGAAAGAGT AGGAGTAAAC ACTCAAAGTC ACCGTGTTCA GTATAATCTC	6660
CCAATTCTAG CTGACTTTTC AGTCATCCAA GATACTGTGG AACCATCACG AACCGTTGTT	6720
GAAAAAATCA TTCCAAACT AAATATCCC GAAGAAGAGA AAGGGAAAAA AACCGAAGAA	6780
ATCAAGAAAA AGAAAAAAC CTCAGAATTG GCAGAACTAA TCTCAGAAAA TGTGAAAGTT	6840
CGCTATGTTG ATGAACAAGG GCGTTTGCTA TCATTGAAAA ATGATACTGG AATTGGAGAA	6900
AAAGAAAGTG ACGGAACCTA CATTAACCAAT AAAAAACAAC TGATTGGTAC CAGCTATAAT	6960
GTCACAGATA AAAA'CTCAG TAGCATGACT ACTACTGACG GAAAAATTA TACTTTTAAA	7020
GAAGCAGATA CAAATTCTGC AAGTTTAACT GGGAAATATTG TAAGCGAAGG TAGAACAGTG	7080
ACCTTAGTTT ATAGAGAAAG CGAAGCGCCA ACCACTGCTA CAGTAACAGC CAATTACTAT	7140
AAAGAAGGTA GGCAAGAGAA GTTGGTAGAG TCTGTTATAA AAGCTGATTT AGCGATAGGT	7200
TCTGAGTATA CCACAGAATC AAAA'CTATT GAAGGGAAAA CAACAACTGA GGACAAAGAA	7260
GACCGAGTTA TCACAAGGAA AACAACATAC ACCTTGGTAG CAACTCCTGA AAATGCGTAC	7320
CAGAAGACGG TGCAACAGTT GACTATTACT ACCGTGAGAA TGTTGAGGAA ACAGTGGTTC	7380
CCAAAACAGC AACCTCTACT GAGACGAAGA CTATAACGCG TATCATTCAT TACGTTGATA	7440
AAGTTACGAA CCAAAATGTA AAAGAAGATG TTGTTCAACC TGTAACCTTA AGCCGTACAA	7500
AAACTGAGAA CAAGGTCACG GGAGTTGTAA CCTACGGTGA ATGGACAACA GGAAACTGGG	7560
ACGAGGTAT ATCTGGTAAG ATTGACAAGT ACAAAGATCC AGATATTCCA ACAGTTGAAT	7620
CACAAGAAGT TACGTCAGAC TCTAGTGATA AAGAAATAAC GGTAAGGTAT GACCGTTTAT	7680
CAACACCAGA AAAACCAATC CCACAACCAA ATCCAGAGCA TCCAAGTGT CCGACACCAA	7740
ACCCAGA'CT ACCAAATCAA GAGACTCCAA CACCAGATAA ACCAACTCCA GAACCAGGTA	7800
CTCCAAAAAC TGAAACTCCA GTGAATCCAG ACCCAGAAGT TCCGACTTAT GAGACAGGTA	7860

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AGAGAGAGGA ATTGCCAAAC ACAGGTACAG AAGCTAATGC TACCTTGGCT AGTGCTGGTA	7920
TCATGACCTT GTTAGCTGGT CTAGGATTAG GATTTTTCAG GAAAAAGAA GATGAAAAAT	7980
AATAGATTTT AGAATCTAGG AACCAGGAAA AGCTCACAGA TGTGGGCTTT TTCCTGGTT	8040
TTGAGAACGA GGTCTTTCGT AAAGAATAAA AACGCTTACA AGTCTGTTGA ACTGGGAAAC	8100
TATGAATCCT ATTTTTTTTAA AAATATTTC AGAAATCAGT TGCGG	8145

(2) INFORMATION FOR SEQ ID NO: 123:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 8697 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 123:

CGGTACCGGG AACGATACCTT AGTCTAATTT TGCACCTTTT CCATGTATGG TAAAGGTTTT	60
TCTTTTTTTTA AAAAGGAAAA CGAGAAGAGG AGGTCTTTAT GAAAGCAAGC ATTGCCTTGC	120
AAGTTTTACC CCTAGTACAG GGGATTGATC GGATAGCTGT TATTGATCAG GTCATTGCTT	180
ATCTGCAWAC TCAAGAAGTG ACGATGGTAG TGACACCATT TGAAACGGTC TTGGAAGGGG	240
AGTTTGATGA GCTTATGCGC ATTCTAAAAG AAGCGCTGGA AGTGGCAGGG CAGGAGGCAG	300
ACAATGTCTT TGCCAATGTC AAAATAAATG TAGGAGAGAT TTAAAGTATT GATGAGAAAC	360
TTGAGAAGTA TACTGAGACG ACACATTAGT CTATTGGGCT TTCTCGGAGT ATTGTCAATC	420
TGGCAGTTAG CAGGTTTTCT TAAACTCTC CCCAAGTTTA TCCTGCCGAC ACCTCTTGAA	480
ATTCTCCAGC CCTTTGTTTC TGACAGAGAA TTTCTCTGGC ACCATAGCTG GCGACCTTG	540
AGAGTGGCTT TACTGGGGCT GATTTTGGGA GTTTTGATTG CCTGTCTTAT GGCTGTGCTC	600
ATGGATAGTT TGACTTGGCT CAAATGACCTG ATTTACCTTA TGATGGTGGT CATTCAGACC	660
ATTCGACCA TTGCCATAGC TCCTATCCTG GTCTTGTGGC TAGGTATGG GATTTTGCCC	720
AAGATTGTCT TGATTATCTT AACGACAACC TTTCCCATCA TCGTTAGTAT TTTGGACGGT	780
TTTAGGCATT GCGACAAGGA TATGCTGACC TTGTTTAGTC TGATCGGGC CAAGCCTTGG	840
CAAATCCTGT GGCATTTTAA AATCCCAGTT AGCCTGCCTT ACTTTTATGC AGGTCTGAGG	900
GTCAGTGTCT CCTACGCCTT TATCACAACT GTGGTATCTG AGTGGTTGGG AGGTTTGA	960
GGTCTGGTG TTTATATGAT TCAGTCTAAA AAAGTGTTC AGTATGATAC CATGTTTGCC	1020
ATTATTATTC TGGTGTGAT TATCAGTCTT TTGGGTATGA AGCTGGTCGA TATCAGTGAA	1080
AAATATGTGA TTAAATGGAA ACGTTCGTAG AATTAGAATG TTTCTGAAAA AGAAAAGAGG	1140

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AAATCAAAT GAAGAAAACA TGGAAAGTGT TTTTAACGCT TGTAACAGCT CTTGTAGCTG	1200
TTGTGCTTGT GGCCTCTGCT CAAGGAACCTG CTTCTAAAGA CAACAAAGAG GCAGAACTTA	1260
AGAAGGTGA CTTTATCCTA GACTGGACAC CAAATACCAA CCACACAGGG CTTTATGTTG	1320
CCAAGGAAAA AGGTTATTC AAAGAAGCTG GAGTGGATGT TGATTTGAAA TTGCCACCAG	1380
AAGAAAGTTC TTCTGACTTG GTTATCAACG GAAAGGCACC ATTTGCAGTG TATTTCCAAG	1440
ACTACATGGC TAAGAAATTG GAAAAAGGAG CAGGAATCAC TGCCGTTGCA GCTATTGTTG	1500
AACACAATAC ATCAGGAATC ATCTCTCGTA AATCTGATAA TGTAAGCAGT CCAAAGACT	1560
TGGTTGGTAA GAAATATGGG ACATGGAATG ACCCAACTGA ACTTGCTATG TTGAAAACCT	1620
TGGTAGAATC TCAAGGTGGA GACTTTGAGA AGGTTGAAAA AGTACCAGAT AACGACTCAA	1680
ACTCAATCAC ACCGATTGCC AATGGCGTCT TTGATACTGC TTGGATTAC TACGGTTGGG	1740
ATGGTATCCT TGCTAAATCT CAAGGTGTAG ATGCTAAGTT CATGTACTTG AAAGACTATG	1800
TCAAGGAGTT TGACTACTAT TCACCAGTTA TCATCGCAA CAACGACTAT CTGAAAGATA	1860
ACAAAGAAGA AGCTCGCAA GTCATCCAAG CCATCAAAAA AGGCTACCAA TATGCCATGG	1920
AACATCCAGA AGAAGCTGCA GATATTCTCA TCAAGAATGC ACCTGAACTC AAGGAAAAAC	1980
GTGACTTTGT CATCGAATCT CAAAAATACT TGTCAAAGA ATACGCAAGC GACAAGGAAA	2040
AATGGGGTCA ATTTGACGCA GCTCGCTGGA ATGCTTTCTA CAAATGGGAT AAAGAAAATG	2100
GTATCCTTAA AGAAGACTTG ACAGACAAAG GCTTCACCAA CGAATTTGTG AAATAATGAC	2160
AGAAATTAGA CTAGAGCAGC TCAGTTATGC CTATGGTCAG GAGAGGATTT TAGAGGATAT	2220
CAACCTACAG GTGACTTCAG GCGAAGTGGT TTCCATCCTA GGCCCAAGTG GTGTTGGAAA	2280
GACCACCCCTC TTTAATCTAA TCGCTGGGAT TTTAGAAGTT CAGTCAGGGA GAATGTCTCT	2340
TGATGGTGAA GAAAAATCCA AGGGGCGCGT GAGTTATATG TTGCAAAAGG ATCTGCTCTT	2400
GGAGCACAAG ACGGTGCTTG GAAATATCAT TCTGCCCCCTC TTGATTCAAA AGGTGGATAA	2460
GGCAGAAGCT ATTTCCCGAG CGGATAAAAT TCTTGCGACC TTCCAGCTGA CAGCTGTAAG	2520
AGACAAGTAT CCTCATGAAC TTAGCGGTGG GATGCGCCAG CGGTAGCCT TACTCCGGAC	2580
CTACCTTTTT GGGCACAAGC TCTTCTCTT AGATGAGGCC TTTAGCGCCT TGGATGAGAT	2640
GACAAAGATG GAACTCCACG CTTGGTATCT TGAGATTCAC AAGCAGTTGC AGCTAACAAAC	2700
CCTGATCATC ACGCATAGTA TTGAGGAGGC CCTCAATCTC AGCGACCGTA TCTATATCTT	2760
GAAAAATCGC CCTGGGCAGA TTGTTTCAGA AATTAACTA GATTGGTCTG AAGATGAGGA	2820
CAAGGAAGTC CAAAAGATTG CCTACAAACG TCAAATTTTG GCGGAATTAG GCTTAGATAA	2880

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GTAGAAAAAT AGGGAGTTGG TGAAGATTAT CCTTTACCAG CGCCCTTTTT CTTTTAAAAA	2940
TGAGAAAAAT TCGGTATAAT AGTCAAACAA GGTCAGGTT TAAAGAGAGA GGTGGGTTTG	3000
TTATGAGATT TAAAAATACA TCGGATCATA TTGAGGCCTA CATCAAGGCG ATTTTAGATC	3060
AATCTGGTAT CGTGGAGTTG CAACGGAGTC AGTTGGCAGA TACCTTTCAG GTTGTTCCTA	3120
GTCAGATTAA CTACGTGATC AAGACACGCT TTACGGAAAG TAGAGGCTAC TTGGTTGAAA	3180
GTAAGCGTGG TGGCGGAGGC TACATTCGTA TAGGACGGAT TGAGTTTCT AGTCATCATG	3240
AAATGCTCCG GGAGCTGCTT TACTCGATTG GTGAGCGAGT CAGTCAAGAA ATTTATGAGG	3300
ATATTCTCCA GCTTTTGGTT GAGCAGGAAT TGATGACCAA GCAGGAGATG AATTGCTAG	3360
AATCAGTAGC TTTGGATCGC GTTTTAGGAG AAGAAGCTCC AGTTGTTCGA GCAAACATGC	3420
TACGTCAGAT CATACAAGAG GTAGATAGAA AAGGGAAGTA AGATGAACTA TTCAAAGCA	3480
TTGAATGAAT GTATCGAAAG TGCCTACATG GTTGCTGGAC ATTTTGGAGC TCGTTATCTA	3540
GAGTCGTGGC ACTTGTTCAT TGCCATGTCT AATCACAGTT ATAGTGTAGC AGGGGCAACT	3600
TTAAATGATT ATCCGTATGA GATGGACCGT TTAGAAGAGG TGGCTTTGGA ACTGACTGAA	3660
ACGGACTATA GCCAGGATGA AACCTTTACG GAATTGCCGT TCTCCCGTCG TTTGCAGGTT	3720
CTTTTGTATG AAGCAGAGTA TGTAGCGTCA GTGGTCCATG CTAAGGTACT AGGGACAGAG	3780
CACGTCCTCT ATGCGATTTT GCATGATAGC AATGCCCTGG CGACTCGTAT CTTGGAGAGG	3840
GCTGGTTTTT CTTATGAAGA CAAGAAAGAT CAGGTCAAGA TTGCTGCTCT TCGTCGAAAT	3900
TTAGAAGAAC GGGCAGGCTG GACTCGTGAA GATCTCAAGG CTTTACGCCA ACGCCATCGT	3960
ACAGTAGCTG ACAAGCAAAA TTCTATGGCC AATATGATGG GCATGCCGA GACTCCTAGT	4020
GGTGGTCTCG AGGATTATAC GCATGATTTG ACAGAGCAAG CGCGTTCTGG CAAGTTAGAA	4080
CCAGTCATCG GTCGGGACAA GGAAATCTCA CGTATGATTC AAATCTTGAG CCGGAAGACT	4140
AAGAACAACC CTGTCTTGCT TGGGGATGCT GGTGTCGGA AAACAGCTCT GCGGCTTGGT	4200
CTTGCCAGC GTATTGCTAG TGGTGACGTG CTTGCGGAAA TGGCTAAGAT GCGCGTGTTA	4260
GAACTTGATT TGATGAATGT CGTTGCAGGG ACACGCTTCC GTGGTGACTT TGAAGAACGC	4320
ATGAATAATA TCATCAAGGA TATTGAAGAA GATGGCCAAG TCATCCTCTT TATCGATGAA	4380
CTCCACACCA TCATGGGTTT TGGTAGCGGG ATTGATTCGA CTCTGGATGC GGCCAATATC	4440
TTGAAACCAG CCTTGGCGCG TGGAACCTTG AGAACGTTG GTGCCACTAC TCAGGAAGAA	4500
TATCAAAAAC ATATCGAAAA AGATGCGGCA CTTTCTCGTC GTTTCGCTAA AGTGACGATT	4560
GAAGAACCAA GTGTGGCAGA TAGTATGACT ATTTTACAAG GTTTGAAGGC GACTTATGAG	4620
AAACATCACC GTGTACAAAT CACAGATGAA GCGGTGAAA CAGCGGTAA GATGGCTCAT	4680

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CGTTATTTAA CCAGTCGTCA CTTGCCAGAC TCTGCTATCG ATCTCTTGGA TGAGGCGGCA	4740
GCAACAGTGC AAAATAAGGC AAAGCATGTA AAAGCAGACG ATTCAGATTT GAGTCCAGCT	4800
GACAAGGCCC TGATGGATGG CAAGTGGAAG CAGGCAGCCC AGCTAATCGC AAAAGAAGAG	4860
GAAGTACCTG TCTACAAAGA CTTGGTGACA GAGTCTGATA TTTTGACCAC CTTGACTCGC	4920
TTGTCTAGAA TCCCAGTTCA AAAACTGACT CAAACGGATG CTAAGAAGTA TTTAAATCTT	4980
GAAGCAGAAC TCCATAAACG GGTATTCGGT CAAGATCAAG CTGTTTCAAG CATTAGCCGT	5040
GCCATTCGCC GCAACCAGTC AGGGATTCGC AGTCATAAGC GTCCGATTGG TTCCTTTATG	5100
TTCTTAGGGC CTACAGGTGT CGGGAAAACCT GAATTAGCCA AGGCTCTGGC AGAAGTTCTT	5160
TTTGACGACG AATCAGCCCT TATCCGCTTT GATATGAGTG AGTATATGGA GAAATTTGCA	5220
GCTAGTCGTC TCAACGGAGC TCCTCCAGGC TATGTAGGAT ATGAAGAAGG TGGGGAGTTG	5280
ACAGAGAAGG TTCGCAATAA ACCCTATTCC GTTCTCTCTT TTGATGAGGT AGAGAAGGCC	5340
CACCCAGATA TCTTTAATGT TCTCTTCAG GTTCTGGATG ACGGTGTCTT GACAGATAGC	5400
AAGGGACGCA AGGTCGATTT TTCAAATACC ATTATCATTG TGACATCGAA TCTAGGTGCG	5460
ACTGCCCTTC GTGATGATAA GACTGTTGGT TTTGGGGCTA AGGATATTCG TTTTGACCAG	5520
GAAAATATGG AAAAACGCAT GTTTGAAGAA CTGAAAAAAG CTTATAGACC GGAATTCATC	5580
AACCGTATTG ATGAGAAGGT GGTCTTCCAT AGCCTATCTA GTGATCATAT GCAGGAAGTG	5640
GTGAAGATTA TGGTCAAGCC TTTAGTGGCA AGTTTGACTG AAAAAGGCAT TGACTTGAAA	5700
TTACAAGCTT CAGCTCTGAA ATTGTTAGCA AATCAAGGAT ATGACCCAGA GATGGGAGCT	5760
CGCCCACTTC GCAGAACCCT GCAAACAGAA GTGGAGGACA AGTTGGCAGA ACTTCTTCTC	5820
AAGGGAGATT TAGTGGCAGG CAGCACACTT AAGATTGGTG TCAAAGCAGG CCAGTTAAAA	5880
TTTGATATTG CATAAAAGAA TAAAAGTATC AGCATCTGAC CATAAGTCAC AGTGGAGTGA	5940
AATTCAATGA AAATCAAAGA GCAAACAGG CAGCTAGCCG CAGGTTGCTC AAAACACTGG	6000
TTTGAGGTTG CAGATAGAGC TGACGTGGTT TGAAGAGATT TTCGAAGAGT ATGAAACTAA	6060
AACCTATAGC TTCTAAACGA TCCGTGGTTT TCATCATTCA ACACAAAATT CATATGTTTA	6120
TTACCCTCCG TCGTATTTGT CTTAGAGCGT GTGTAGTAGA AAAAGAGCAG TCTTATCTGA	6180
AATTTTATTT CTTTCAAAG AGACCTGTTT CTTTTTGGCA TGTCAAATCC GTTCTAGCTG	6240
GTATTTGAAA AATCAAACCTA ATATTCAATG AAAATCAAAG AACAACTAG GAAGCTAGCC	6300
GCAGGTGCT CAAAACACTG TTTTGAGGTT GTAGATAGAG CTGACGTGGT TTGAAGAGAT	6360
TTTCGAAGAG TATAAGCTGC AAGATGAATG ATTTCTTGT ATTGACGTTG TTGTTGACAA	6420

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AAAGTAGCGG ATAAATGAAA TCCATTCCAT TATCATAGAT GATAGGCTGG TAGGAAATTT	6480
TCAAATAGCA TACAGGAAAT AGATGTATGG AGTTCTGGTA GTAGAAAGGG AGAGAGATGA	6540
ACATTTTAGT TGCAGATGAC GAGGAAATGA TTAGAGAAGG AATTGCAGCA TTTCTGACAG	6600
AAGAGGGTTA TCATGTCATT ATGGCTAAGG ATGGACAAGA GGTCTTGGA AAATTTCAAG	6660
ATCTCCCTAT CCATCTCATG GTACTGGATT TAATGATGCC TAGGAAGAGT GGTTTTGAAG	6720
TGTTAAAAGA AATCAATCAA AAGCACGATA TTCCTGTCAT CGTCTTGAGT GCTCTGGGAG	6780
ATGAAACTAC TCAGTCACAG GTATTTGATC TCTATGCTGA TGATCATGTG ACAAACCTT	6840
TTTCTTTGGT ACTGCTTGTG AAGCGTATTA AGGCGCTTAT CAGACGTAC TACGTCATAG	6900
AGGATCTTTG GCGATATCAG GATGTAACAG TGGATTTTAC CTCTTACAAA GCACATTATA	6960
AAAATGAAGA AATTGATCTC AAACCAAAGG AATTACTGGT ACTAAAGTGT TTGATTCAGC	7020
ATAAAAATCA AGTTTAAAGT AGAGAGCAGA TATTGGAAGA AATTTCAAAA GATGTAGCTG	7080
ATTTACCTTG TGATAGGGTC GTTGATGTCT ATATTCGTAC TCTTCGCAAA AAATTAGCTT	7140
TAGATTGTAT CGTGACTGTG AAAAATGTTG GGTATAAGAT TAGCTTATGA TAAAAATCC	7200
TAAATTATTA ACCAAGTCTT TTTTAAGAAG TTTTGCAATT CTAGGTGGTG TTGGTCTAGT	7260
CATTCATATA GCTATTTIAT TGACCTTTCC TTTTATTAT ATTCAACTGG AGGGGGAAAA	7320
GTTTAATCAG AGCCCAAGAG TGTTTACGGA GTATTTAAAG ACTAAGACAT CTGATGAAAT	7380
TCCAAGCITA CTCCAGTCTT ATTCAAAGTC CTTGACCATA TCTGCTCACC TTAAGAGAGA	7440
TATTGTAGAT AAGCGGCTCC CTCTTGTCGA TGACTTGGAT ATTAAAGATG GAAAGCTATC	7500
AAATTATATC GTGATGTTAG ATATGTCTGT TAGTACAGCA GATGGTAAAC AGGTAACCGT	7560
GCAATTTGTT CACGGGGTGG ATGTCTACAA AGAAGCAAAG AATATTTTGC TTTTGTATCT	7620
CCCATATACA TTTTGGTGA CAATTGCTTT TTCCTTGTG TTTCTTATT TTTATACTAA	7680
ACGCTTGCTC AATCCTCTTT TTTACATTTT AGAAGTGACT AGTAAATGC AAGATTGGA	7740
TGACAATATT CGTTTTGATG AAAGTAGGAA AGATGAAGTT GGTGAAGTTG GAAAACAGAT	7800
TAATGGTATG TATGAGCACT TGTGAAGGT TATTTATGAG TTGGAAAGTC GTAATGAGCA	7860
AATTGTAAAA TTGCAAAATC AAAAGGTTTC CTTTGTCCGC GGAGCATCAC ATGAGTTGAA	7920
AACCCCTTTA GCCAGTCTTA GAATTATCCT AGAGAATATG CAGCATAATA TTGGAGATTA	7980
CAAAGATCAT CAAAATATA TTGCAAAGAG TATAAATAAG ATTGACCAGA TGAGCCACTT	8040
ATTAGAAGAA GTACTGGAGT CTTCTAAAT CCAAGAGTGG ACAGAGTGTC GTGAGACCTT	8100
GACTGTTAAG CCAGTTTATG TAGATATTTT ATCACGTTAT CAAGAATTAG CTCATTCAAT	8160
AGGTGTTACA ATTGAAAATC AATTGACAGA TGCTACCAGG GTCGTCATGA GTCTTAGGGC	8220

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ATTGGATAAG GTTTGTGACAA ACCTGATTAG TAATGCAATT AAATATTTCAG ATAAAAATGG	8280
GCGTGTAATC ATATCCGAGC AAGATGGCTA TCTCTCTATC AAAAATACAT GTCCGCCTCT	8340
AAAGTACCAA GAACTAGAAC ATTTATTTGA TATATTCTAT CATTCTCAA TCGTGACAGA	8400
TAAGGATGAA AGTTCCGGTT TGGGTCTTTA CATGTGAAT AATATTTTAG AAAGCTATCA	8460
AATGGATTAT AGTTTCTCC CTTATGAACA CGGTATGGAA TTAAAGATTA GCTTGTAGAC	8520
AGATTAGTTT TTTATTAAAG TTCATATAGG GTTAACATAA GTGTGTTATT CTTTGTGTAG	8580
ATAAAAGAAA GGATACTAAT ATGGTATTAG CGATTATTTT AGTAACATTC TTTATTCGAT	8640
TGATTTTTTT AAAGCGTTCG ATAGAGAATG AGAAACGAAT CCTTAGCAAT GCGCGGG	8697

(2) INFORMATION FOR SEQ ID NO: 124:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 4317 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 124:

AACCATACAT ACGCAAGGC AAAGCTGACG CGGTTTGAAG AGATTTTCCA AGAGTATTAG	60
TTGCCCTTAA AGGCATCCAC CATCGTTTGA AATCTTTCAT TTGAGAGAGT AATCCCTTTG	120
CCCATTTTAG TATGGTCTGG ACTCCAAGCA CGAATATCAA ACTTTGCACG GGCACCATTA	180
AAGCTCACAC GGTAAATTTC CTTGGTCCAA CCTTTTTTCGTTTTCAGAAAG AGTCAACAAG	240
TGCTCTTCGA TTTCAAATGT AAATCTGCCC ATTTTCTTCT CCTTTTTTAG TTTCATTAGT	300
TTATTCGTAA AATCTTGTAG ATTTTAGGAA AATTTTATAT AATATTGATA TAAAAGAAGG	360
GAGGCCAATA TGAGACATAA ATTCCAGCAA GTTCTAAATA AAATACATGA TTTTTFAAAT	420
GGATATGACC AACCTGACCA GACTGAAACC AACTCCCTTA CAGCCACTAT TGAAGAGGCT	480
ATCCAGAAAC AAACCGCTGT TCACCTTATC TTGTCTGAGA CAAGCTTTAC AGGTGACATC	540
ATCAAATATG ATCAGCAAGG CCAGCAAATT ATCGTGAAAA ATTTTTCCAA AAATGTGAGC	600
CGGATTATCC GTATAAGCGA TATTCAACGC CTGCGATTTG TCCCCTCAAC TGTCCAAACA	660
GCCCCAAAAA ATAGATTTAA GAAAGAGTGA GATGTAGTTG CTTTCATCCCA CTCTTTTTTC	720
TTAGCGAATT TGTTCAAAAT GTAAATGAAC TGCGATATGA TCTCCATAAC CACTTCTTTC	780
CAAGTCACGT TGTAACGAT AGGAAATGTA GTGTTCTGCA ATGGTAATGT AACCTGCGCC	840
CAATAAACGA TGTTCACCA TAGATTGAAT CATACTGATA GTCGCACGTT CCACCTTGCC	900

864

TTCTTGTA	AACTA	CCTCTTAGT	GACTTGAGCA	AGATTTTGAC	GCAAATCATC	960
TGTCAAAACA	TAAACAGTTT	GGGCTGCCTT	CAAGATGGCT	TGGTAAATCT	TATCTGGATT	1020
AAATTCAGCA	ATTTCGCCAT	TACGTTTGAT	TACTTGCCATA	GGTTTCTCCT	TTATCTTTTG	1080
TTTTCTTTGA	TTTCTGCCAG	CATTTTTTCT	TCTTCTACTG	TCAGTTGATA	ATGTTCAAGT	1140
AAATCCGGTC	TGCGCTCGTA	GGTTTTCTTT	AAACTCTCGT	ACAATCGCCA	CTGACGAATC	1200
TTTTCATGGT	GGCCACTCAT	CAATACATCT	GGCACGACCA	TGCCTCGATA	ATCATAGGGA	1260
CGTGTGTACT	GAGGATATTC	TAAAAGACCT	GAAGAAAAAC	TATCATCTTG	GTGGCTAGAC	1320
TCCTTGCCAA	TCACTTCTGG	AATCAGGCGA	ACTGTAGCAT	CAATCATGGT	CATAGCTGCC	1380
AATTCTCCAC	CAGTGAGGAC	ATAGTCACCT	AGGGAAATCT	CATCTGTTAC	CAAGGTCTTA	1440
ATGCGCTCAT	CATAACCCCTC	ATAGTGCCCA	CAGATAAAGA	TTAGCTCTTC	CTCTTGAGCC	1500
AAATCTTCAG	CATAAGCCTG	ATCAAACTGC	TTTCCAGCAG	GATCAAGGAG	AATAACGCGC	1560
GGATTTTCT	TTTCAATAGC	ATCAAAGGAA	TCGAAAATAG	GTGTGTCTCT	GAGCAACATG	1620
CCCTGACCGC	CTCCGTAGGG	CTCATCATCT	ACATGACGGG	CCTTTTCAGC	ATTTTCTCGA	1680
AAATATGAT	ACTGGATATC	CAAGAGCCCT	TTTCTCTGAG	CCTTTCCAAC	GATTGAGTGC	1740
TCCAGTGGAG	AAAACATCTC	TGGAAAGAGG	GTTAAATAT	CAATCTTCAT	CGCTAAACCC	1800
TTCTAAGATT	TCCACATCGA	CCCGTTTACT	TGGAATATCA	ACATTGAGAA	CCACTGGTGG	1860
GATATAAGGT	AAAAGCAAAT	CACGTTTGCC	TTTTCGTTTG	ACCACCCAGA	CATCATTAGC	1920
ACCTGGTTGC	AGGATTTCCT	TGATGGTTCC	AACCAAGCTA	TCACCCTCAT	AGACTTCCAA	1980
ACCGATAATC	TCGTGATAGT	AAAATTACCC	ATCGTCTAGG	TCATTCAAAT	CTTCCTCAGC	2040
GACCTTGAGA	CTGTATCCCT	TGTACTTTTC	GATAGTATTG	ATATGGTACA	TATCTTTGAA	2100
TTTAATAATG	TCAAAGTTCT	TCTGTTTACG	GTGGCTAGCG	ATGGTCACTG	TTTGGACAAA	2160
CTGATCTTTT	TCATCAAACA	AAACCAGCTC	AGCTCCTTTT	TTAAACCGTT	CTTCTGCAAA	2220
ATCCGTCACA	GACAAGACTC	GCATCTCCCC	CTGTAATCCC	TGCGTATTAA	CGATTTTCCC	2280
AACATTAAAG	TAGTTCATCT	TGTCTCCTGT	AATCTCCTTT	TTTCCATCTT	ATTCTAACAA	2340
TTCTCGAATA	ATAGCCGCAA	TTTTTTCCGA	TTCTGACCAT	TGTAAATAAT	GGTGATTCCC	2400
TCCTAAAATG	AGTTTAGTAT	TGGAAGTCCA	ATATCTGTAT	TCTCTGTACT	CTTTTCTCT	2460
ATAAGGCTGA	CAAAAAACAA	ATACAGGAAT	ATGAGCTTCT	ATAGATACAT	CCTCAAAATC	2520
TTCTCAGTA	ATCTCTCCAG	ATATCTGAAA	TTCTGGATCT	TGATTTTCCA	ACTCTAAGCC	2580
TTTTTCTTGC	ATTAAATCCC	AGATTTTTTT	ATTGTTTCA	GGACTAAATG	TTGCTTGAGT	2640
TAAGTTCTTA	AAATAAAGTT	CAGGACCACA	CTCGTCAATC	AGCCTCATCT	GCTCTTCCAT	2700

865

TTCTGGATAA GGATTTTCTG AAAAATCAGC AAACATGACT TTTTtagTTG TCGGTTCAAT	2760
TGCTACTAAA GTCTGACGCT TAATTGGTTT CTCGAGTAAT TTGCAACCTA AAATCCACT	2820
CCAACTATGT GCACAAAGTA TATATTCAGA AATTCCTAAT TCTTCAAGTA CTTCATAAAC	2880
CGCATCTGCA AGATTATCTA GATTTTTTCC AGCTTGGTCA TGAATCGGAC TCCTACCTGT	2940
GTTCGGAAAA TCAATTGTCA AATAACCAAT TGTAGGAGGA GGTTTTTCaA GTATAAGTGA	3000
AAAATTTTCA TAACTTGGTA GCAAACCTGC TCCGTTTAAA CAAACTAGCA CTTCTTTTG	3060
CTTTTGATAA GTAACAGAGA GGCTACCAAT TTCTGTAGAT ACTTCAAACC TCTCATAAA	3120
GAAATCCACT GATTCTATAT AATGAATTAT TAAAAATCCT TATCCTTTAT TTTATCACGT	3180
TCCAAGGATT TTCTCAAGTT GGAGGAAGGG GACAATATCT CTACTTTCCC TTCAATAATC	3240
CTTCCAAATt ATGTTTATGT TGGTAATTAA TGGCTGCGGT TTTGTCTTTC TCAAAGACAG	3300
TCTTGGAAG GTCAATATGA TTAATAGCTA CGATTGCGAC GGTGTAGTAA ATGATATCAG	3360
CCAGTTCTCT GGCAAGTTCC TCCTTCGAAT CCTATCCCTT CTTTTCGACC AGAGCGCCTA	3420
TTCAAAACCT CGACTACTTC TCCGACTTCC TCCACTAACT TCATAAAGAG ACCTTCATCA	3480
GTCCGAGACT GCTGTTAATG TTCGATTAAg TAGTCTTGGa ATTGCCTAAA CGTTCAATCT	3540
TTTATAGTAT ATTGAACTA GAATAGTACA CCTTTACTTC TAAACATTG TTAGAAATCG	3600
ATTTGACTGT CCTGATCGAT TTGTCCTGTT CTTGTTTCAT TTTACTATAT CTTCTATTCC	3660
ACACAAAAAA GOGAGACATC CGTCCCGCCC TTCTTATTTT TCGTCAATAA CGATTCTTAC	3720
TTTTTTGTAT TCAGTTGGGA CAGAGTAGAC AATCGTTCTT ATCGCAGAAA TAGTGCAGACC	3780
CTTACGACCG ATTACACGAC CCACATCGCT TTGATCAAGA TTCAAATGAT ATTCCAAAAA	3840
TTCTGGTGTA TCCTCAATCT TGATAGTTAA GGCATCTGGT TGTGAAATTA AGGGTTTCAC	3900
AATCGCAATA ATGAGATTTT CAATCGTATC CATCTGTCAA CCTACTTTAA ACTTATTTTG	3960
AAAATTTAGA ATCGTGAAT TTTTTCaATA CGCCTTCTTT TGAAAGGATG TTACGTACTG	4020
TGCTTGAAGG TTGAGCTCCA TTAGCCAACC ATGCAAGAAC GCGGTCTTCT TTCAAAGTTA	4080
CTTGGTTTTC AGCAACAAGT GGGTTGTAAG TTCCAACtGT TTCGATGAAA CGTCCGTCAC	4140
GTGGTGAACG TGAATCTGCT ACGTTGATAC GGTAGAAAGG TTTTTCCTTA GAACCCATAC	4200
GAGTCAAACG GATTTTAACT GCCATTTTtA AAGTCTCATT TCTTTAATTT TTTATTTTCGG	4260
TGAAATAGCT GAGCTATTTA GCACATGTTc TATTATAGCA GATTCTGGC ATGTGTC	4317

(2) INFORMATION FOR SEQ ID NO: 125:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 4881 base pairs

866

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 125:

AATTTATTTG ACTGAAATT GTAGAGGGTT CTCGAAATTT CTTGAATGGT TAAATAAGG	60
ACAAGAGAAA ACATGGATAT CTATATCCCTT GTGCCAAAAA AACCACCTGCC CTCCCCAGAC	120
CAACCTGAGG AAAGCAGTGA TTCTTATTTT AGGAGTTAGG AATGAATACA CGAAATCAAT	180
TTAGCTGATT ATTTTTTGTT TTTCAAGAAT TCATCGTATT GTTTTTCAT TTCGTTCAAT	240
ACTTTTTCGT AGGCACCTTC AGATTTCAT TTTTCCATCA ATTCTGGAAT CGCTTTATCT	300
GGGTCTACAG TACCAGTGTT GATAGCTGTA TCAAATTGTT GCATTGTGTT AGCAATAGCT	360
GAGATTTCAG ATTTACACATT GTCAGTATG AAGATAAATC CAAGCGCTGG AGATTCTTTA	420
GCTTCTGCCA ATTCTTTCTT AGAATTTTCG ATTTGTGTTG CTGTAACGTT TTCGTTGATG	480
TAAAGGATCC AGTTGTTACC AGTGTTCAT CCACCCATGT GAGTGTTCCT TTTGTAGCCA	540
TCAAGAACGC GAACACGTT TTCTTTACCT TCAATTTTTT CCCAGTTCTT GCCTTCTGGA	600
CCGTAAACAA GACCGTTCAA GAGTTCTGGG TTCGTATTCA AGAGGTTCAA GATTTCATT	660
GATTTTCTT TGTCTTAGA GTTGTGTTGAG ATGACAAAGT TAGCAACTTG TGTGTTTGG	720
TTTTCTTGA TGAAGTAGT AATTGGTTG ATTTGGATAT CTTTGTGGC AACACGTGAA	780
AGCAAGCTGT TACCGTAGTC AGCTGGTCCT ACTGTTCTT CACGAACGAA CCAAGTATCT	840
TGTTGAAGGT CAAAGGAAGT ATCGCTTGTT GCGACGTCCT TTGGAATGTA GCCAGCTTCA	900
TAGAATTTGT GAAGAGCTT CAAGTGTCT TTGAAACGAG GCACTTCGTA ACGGTTTACA	960
ACTTTAGTAG TATCGCCTTC AAGGTCGATA ACGAATGGAA GACCGTTTGC TACTGGGTAG	1020
TCAAAATTAT CAGATGGGAT GAAAACCTTA CCAATAGCAA ATGGTACTAC GTCTGGAGCT	1080
TTTTCTTTGA TTGTTTCAA GACTGGCTCA AGAGTTTCGT AAGAAGTAAC ACCTGAAATA	1140
TCGATACCAT ATTTAGCAAG GAGAGTTCCG TTGAAGGCAA AGTTTGAAGA TGATGCAACG	1200
TTGGCTGCAA CTGGAACAGC GTAAATCTTA CCATTACAG TATTACCCTT GATGTAAGCT	1260
GGGTCAAGTG CTTTGTAAG GTCTTTACCT TCTTTTGTGT ACAATTCGT CAAGTCAGCG	1320
TAAGCACCTT TTTGAGCATT TACAATATAG TTATCTGCAA AGGCAATATC ATAGTTTCA	1380
CCAGATGATG TGATAACTGA CATTTCTTA CCATAGTCAC CCCAGCCAAG GTATTGGATA	1440
TCCAATTTGG CACCAACTTT TTCTTCAATG ATTTGTGTTG CATTTGCTAA CAATTCATCC	1500
AAGTTGCTG GTTTGTCACC GATTTGTGAC ATTTTGATAA CAGGTTTGTC ACCTGAATCA	1560

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GCAGCTTTT	TGCTGTTACC	TGTCAAATTT	CCACAAGCAG	CAAGACCTGC	AGCCAGAGCG	1620
ACTACACTAG	CAGATGCAAA	AGCATATTTT	TTCCAGTTTT	TCATGATAAA	AACTCCTTTT	1680
TTTATTTT	AACTTATAAA	CAATGTAATG	ATCTTATACT	CAATAAAAT	CAAAGAGCAA	1740
ACTAGAAAAC	TAGCCGCAGG	CTGCTCAAAG	CACTGCTTTG	AGGTTGTAGA	TAAGACTGAC	1800
GAAGTCAGTT	ACATATATCT	ACGGCAAGGC	GACGTTGACG	CGGTTTGAAT	TTGATTTTCG	1860
AAGAGTATTA	ACTTCACACA	AGGGAAGTTG	GGAAC TGAGA	AATGTTATTT	CTCAATAAGC	1920
ACTATTCTTT	CACACCACCG	ATAGTCAAAC	CTTTTACAAA	GTAGCGTTGG	AAAAATGGAT	1980
ACAAAATCGC	GATTGGAAGG	GTTGCAACCA	CAACCATGGC	CATACGACCT	GTTTCTTTTCG	2040
GTAGAGCAAC	TCCCAGTTGA	CCAATCAAGC	CGACCGCTTT	GGCAATGTAG	TCCATATTTT	2100
GTTGGATTTG	CATGAGCAAA	TATTGCAATG	GATACAAGTT	GTCACCTCTG	ATGTAAAGAA	2160
GGGCGTTGAA	CCAGTCATTC	CAGAAACCAA	GAGCTGTTAA	GAGCGTGATG	GTTGCGATAC	2220
CTGGTAGTGA	CAATGGCAAA	CAGATTTGGA	AGAAAATCCG	GGCCTCACTG	GCACCATCGA	2280
TACGAGCCGA	TTCTAGAATG	GCTTCTGGAA	TGGTCTTCTT	GAAGAAGGAA	CGCATCAAGA	2340
TGATGTTAAA	TGGTGAGAGA	AGCATTTGGAA	CAATCAAGGC	CCAAACAGTG	TCACCAAGCT	2400
GAAGTACACG	GGTCACCATG	ATATAACCTG	GTACCAAACC	AGCGTTGAAC	AACATACTGA	2460
GAAGGACGAA	GATGGTAAAG	AATCTGCGAT	ACTTAAAGGT	TGTCCGTGAA	ATAGCGTAGG	2520
CATAGGTTGT	TGTGATAAAG	ACATTTGTCA	ATGTCCCAAC	TACGGTTACA	AAGACAGAGA	2580
TGAAGAGGGC	TTGTAGGATT	TTATCCTTAA	ACTGTGCCAA	AAACTCAAAA	CCGTCTAAGC	2640
CAAATTGGGA	TGGGAAGAAG	CTATAGCCGT	ATTGGAGGAG	GCTTTTCTCG	TCTGTCACTG	2700
AAATAATGAT	AACGAATACA	AAAGGTAGGA	TACAAGAGAG	GGCAATCAAA	CCCGAAATGA	2760
TACTGAAGAA	GATATCTGCT	TTCTTACTGA	AGGAGTGAAT	GCCGACATTA	TCAATTTTTT	2820
CTTTTTTAAT	TTTCTTTTTT	GCCATATTCT	CCTCCTTTCT	AGAACAAAGC	TGAGTTTGGA	2880
TCGACTCGTC	TTGCAAGCAA	GTTTGATAGG	ATAACCAGAA	TCAAACCAAC	AACGGATTGG	2940
TAAAGACCGG	CTGCTGCAGC	CATACCGATA	TCTGCTGTCT	GAGTCAAACC	ATTAAAGACA	3000
TATACGTCCA	AAACGTTGGT	TACATGTGTA	AGCTGACCAG	CATTGTGTGG	GATTTGATAG	3060
AAGAGACCGA	AGTCTGCGCG	GAAGATATTT	CCGACTGCAA	GGATGGTCAA	TACAGTTACA	3120
AGCGGAGTCA	ACTGAGGAAT	GGTTACGTTG	CGAATACGTT	GCCACTTGCT	AGCTCCGTCC	3180
ACTGTCGCTG	CTTCGTAGTA	GGTTGGATCA	ATTC CATGA	TCGTCGCATA	GTACATGACA	3240
CTGCTATATC	CAAAGCCTTT	CCAAATACCT	AGGAAAAGTA	GGAGATAGGG	CCAGATGCCC	3300

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AGGTCAGCGT AGAAATTGAC TTCTTTGAGA CCAAGACTTT CCAATAGATG ATTGAACACC	3360
CCTTTATCAA TATTTAGGAA GGCATCTGTA AAGAAACTGA TGATAACCCA AGACAAGAAG	3420
TAAGGGAACA ACATAGAAGT TTGAAAAATC TTCACCATTTC TCTTAGAACG GAGCTCGCTG	3480
AGGATAATGG CAATCCCTAC AGATACAAC TAAACCTAGAA AGATAAAGCC AAGATTGTAG	3540
AGGACAGTAT TTCGTGTGAT AATAAAGGCG TCTCTTGAAC TAAATAAGAA TCTAAAATTA	3600
TCGAGTCCGA CCCATTTACT ATTTATGATA CTATCTATGA AACCATTACT GGTGATGTGG	3660
TAGTCTTTGA AGGCAACCAC GTTCCCAAAT ACTGGAATGT AAAAGAATAG AATCAACCAG	3720
AGTGCCCTTG GCAAAACCAT CAAGAGAAAG ATCCAGTTGT CTCTCAATGT TTTTGAAAAC	3780
TTTTTCATAA TTTCTCCCT TTTTATTTTG ATATCCATCT AAAAAATCTT TTTTAGACTT	3840
TTGATAACGA TTACATTATT AGTATACTCC TATTTGCAGG TTAGGTTAAA CTCCTAATTA	3900
TAGAAAAAAC TCCACAAAT ATGTAGCAGA TTTAAACTT TATCACCAC ATCAAACAAA	3960
TGTCCTAAAT CAATTGTTTA TTTTATCTCT ATTAGCCCAG TGATGGCGTC ACTCTGTTAT	4020
AAGCATCCAA CAACGGGGTA TACTGAAAA TCTCCAGACT AGGGAAC TCA GCGATAGTTC	4080
CTAATCTGGA GATTTTAAAT ATGTTATTAG GCGTTTGCTT TCAACTTAGC AATAACCTCT	4140
TTAAGATTAT CAATCAACTC TGCTGCAGTA TGCTCAGAGC CTTTTTCATC TGCCAAGAAC	4200
AAAAC TGCTT TTTGAAGTTC TTTTGTAGAG TTTTCAAGGA CATCCTTATC TACTGTTTCA	4260
AGGTTTGAAGT CTTTAAAGAAG TTTACTTAAT TCCTTGGCTA ATTTCTTGAG TTTGATTTGC	4320
AGACTCATCT TCTCCTGCTG TTTCTTTGCC CGCTGTTTGT CCTCCATCCT TAGTTGCTGA	4380
CTGGCTTTCC TTAATGGACT CTAGGGAAGC AATGGCATCT TTGACTGTTT GCAAGATATC	4440
ACGTAAACCT TGCTCTGTCA AACTATCATC TGCAAAAGCT TTATTAGCCT CTGCCAAAAC	4500
CAGACGTGCT GAATCTGTGG TAGGATTCGA TACACCTGTC AATGATCTCA AAAGATTTTC	4560
TAAGGTTTGA GTCTGCTTAC TAATACTAGA CTAAAATCAA AAAGTATTAT ATAACAGTGA	4620
TATGAAATCA ACTAAAGAAG AAATCCAAAC CATCAAAACA CTTTAAAAAG ACTCTCGTAC	4680
AGCTAAATAT CATAAACGCC TTCAAATCGT TCTATTTTGT CTGATGGGCA AATCTTATAA	4740
AGAGATTATA GAACTTTTAT AGTAGTTTGA AATAAGATGT GAACATCTCT ATCAGGAAAG	4800
TCAAATTAAT TTATAGAAAT ATTTTAGCAG CCAAGGTGTA CTGTTATAGA TTCAATACAC	4860
TATACTTGGT GGTTTAGCTC G	4881

(2) INFORMATION FOR SEQ ID NO: 126:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 13121 base pairs
 (B) TYPE: nucleic acid

869

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 126:

AGGATCCCCG GAAAAGGAGA CTAAAAATGA AGAAAAAATT TCTAGCATTT TTGCTAATTT	60
TATTCCCAAT TTTCTCATTA GGTATTGCCA AAGCAGAAAC GATTAAGATT GTTCTGATA	120
CCGCCTATGC ACCTTTTGAG TTAAAGATT CAGATCAAAC TTATAAAGGA ATTGATGTTG	180
ACATTATTAA CAAAGTCGCT GAGATTAAAG GCTGGAACAT TCAGATGTCC TATCCTGGAT	240
TTGACGCAGC AGTCAATGCG GTTCAAGCTG GGCAAGCCGA CGCTATCATG GCAGGGATGA	300
CAAAGACTAA AGAACGTGAA AAAGTCTTCA CCATGCTCTGA TACTTACTAT GATACAAAAG	360
TTGTCTATGC TACTACAAAG TCACACAAA TTAGCAAGTA CGACCAATTA ACTGGCAAAA	420
CCGTTGGTGT TAAAAACGGA ACTGCCGCTC AACGTTTCCT TGAAACAATC AAAGATAAAT	480
ACGGCTTTAC TATTAATAA TTTGACACTG GTGATTAAAT GAACAACAGC TTGAGTGCTG	540
GTGCCATCGA TGCCATGATG GATGACAAAC CTGTTATCGA ATATGCCATT AACCAAGGTC	600
AAGACCTCCA TATTGAAATG GATGGTGAAG CTGTAGGAAG TTTTGCTTTC GGTGTGAAAA	660
AAGGAAGTAA ATACGAGCAC CTGGTTACTG AATTTAACCA AGCCTTGTCT GAAATGAAAA	720
AAGATGGTAG TCTTGATAAA ATTATCAAGA AATGGACTGC TTCATCATCT TCAGCAGTGC	780
CAACTACAAC TACTCTCGCA GGATTAAAAG CTATTCCTGT TAAGCCTAAA TATATCATTTG	840
CCAGCGATTG TTCTTTTGCC CCTTTTGTTT TCCAAAATTC AAGCAACCAA TACACTGGTA	900
TTGATATGGA ATTGATTAAG GCAATCGCTA AAGACCAAGG TTTTGAAATT GAAATCACCA	960
ACCCTGGTTT TGATGCTGCT ATCAGTGCTG TCCAAGCTGG TCAAGCCGAT GGIATCATCG	1020
CTGGTATGTC TGTCACAGAT GCTCGTAAGG CAACTTTTGA CTTCCTCAGAA TCATACTACA	1080
CTGCTAATAC CATTCCTGGT GTCAAAGAAT CAAGCAATAT TGCTTCTTAT GAAGATCTAA	1140
AAGGAAAGAC AGTCGGTGTT AAAAACGGAA CTGCTTCTCA AACCTTCCTA ACAGAAAATC	1200
AAAGCAAATA CGGCTACAAA ATCAAAACCT TTGCTGATGG TTCTTCAATG TATGACAGTT	1260
TAAACACTGG TGCCATTGAT GCCGTTATGG ATGATGAACC TGTCTCAAA TATTCTATCA	1320
GCCAAGGTCA AAAATTGAAA ACTCCAATCT CTGGAAGTCC AATCGGTGAA ACAGCCTTTG	1380
CCGTTAAAAA AGGAGCAAAT CCAGAACTGA TTGAAATGTT CAACAACGGA CTTGCAAACC	1440
TTAAAGCAAA CGGTGAATTC CAAAGATTTC TTGACAAATA CCTAGCTAGC GAATCTTCAA	1500
CTGCTTCAAC AAGTACTGTT GACGAAACAA CGCTCTGGGG CTGCTTCAA AACAACTACA	1560

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AACAACTCCT TAGCGGTCTT GGTATCACTC TTGCTCTAGC TCTTATCTCA TTTGCTATTG	1620
CCATTGTTCAT CGGAATTATC TTCGGTATGT TTAGCGTTAG CCCATACAAA TCTCTTCGCG	1680
TCATCTCTGA GATTTTCGTT GACGTTATTC GTGGTATTCC ATTGATGATT CTGCGAGCCT	1740
TCATCTTCTG GGGAATTCCA AACTTCATCG AGTCTATCAC AGGCCAACAA AGCCCAATTA	1800
ACGACTTTGT AGCTGGAACC ATTGCCCTCT CACTCAATGC GGCTGCTTAT ATCGCTGAAA	1860
TCGTTCGTGG TGGTATTAG GCCGTTCAG TTGGCCAAAT GGAAGCCAGC CGAAGCTTGG	1920
GTATCTCTTA TGGAAAAACC ATGCGTAAGA TTATCTTGCC ACAAGCAACT AAATTGATGT	1980
TGCCAAACTT TGTCAACCAA TTCGTTATCG CTCTTAAAGA TACAACTATC GTATCTGCTA	2040
TCGGTTTGGT TGAATCTTC CAAACTGGTA AGATTATCAT TGCTCGTAAC TACCAAAGTT	2100
TCAAGATGTA TGCAATCCTT GCTATCTTCT ATCTTGTAAT TATCACACTT TTGACTAGAC	2160
TAGCGAAACG CTTAGAAAAG AGGATTCTGT AATGGCAAAA TTAATAATTG ATGTAAATGA	2220
TTTACACAAG CACTATGGAA AAAATGAAGT CCTAAAAGGA ATTACGACTA AGTCTATGA	2280
AGGAGATGTT GTTTGTATCA TCGGTCCTTC AGGTTCTGGT AAGTCAACTT TCCTCCGTAG	2340
CCTCAATCTT TTAGAAGAAG TCACTAGCGG TCACATCACT GTGAACGGCT ATGATTTAAC	2400
TGAAAAACA ACCAATGTTG ACCACGTCCG TGAAAATATC GGCATGGTAT TCCAACACTT	2460
CAACCTCTTC CCTCATATGT CTGTATTGGA CAACATCACC TTTGCTCCTA TTGAGCACAA	2520
GTTGATGACT AAGCAAGAAG CTGAGGAATT GGAATGGAG TTGCTTGAAA AGGTTGGACT	2580
AGCAGATAAA GCTAATGCCA ATCCAGATAG CCTATCAGGT GGTCAAAAAC AACGTGTGGC	2640
CATCGCTCGT GGCCTAGCAA TGAATCCAGA CATCATGCTC TTCGATGAAC CAACTTCTGC	2700
CCTTGACCCCT GAGATGGTTG GAGACGTAAT TAACGTTATG AAGGAATTGG CTGAGCAAGG	2760
CATGACCATG ATTATCGTAA CCCATGAGAT GGGATTGCT CGTCAGGTTG CCAACCGCGT	2820
TATCTTTACT GCAGATGGCG AGTTCCTTGA AGACGGAACA CCTGACCAA TCTTTGATAA	2880
CCCACAACAC CCTCGTCTGA AAGAGTTCTT AGATAAGGTC TTAACGCTCT AACTCAAAC	2940
TGTAAGGATT TCCTTGCACT TTTTCTACCT CGTATTGGAA TTTTGTATT TTCGGAAAAAT	3000
TATGTTAGAA TTAAGTTTAT GAAATGAGGT TTCCTCATAC CTAGCAAGAC TAGGAATAAA	3060
AATAGAAATT AGGTAGCTAG ATGTCATCTA AGGTTATTGT TACAATTTTC GGTGCGAGTG	3120
GAGACCTGGC TAAACGCAAG CTCTACCCTT CCCTTTTGTAG ACTATATCAA TCCGGCAATC	3180
TTTCCAAGCA CTTTGCCGTT ATTGGAAGTG CCCGTAGACC TTGGAGTAAG GAATATTTTG	3240
AATCTGTAGT TGTCGAGTCC ATCCTTGATT TGGCAGATAG TACCGAGCAA GCGCAAGAAT	3300
TTGCTAGCCA CTTCTACTAT CAAAGCCATG ATGTCAATGA TTCGGAACAT TATATTGCTT	3360

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TGCGTCAATT	ACAAGCTGAG	CTTAATGAAA	AATACCAAGC	TGAACACAA	AAGCTCTTCT	3420
TCTTGTCTAT	GGCACCTCAG	TTCTTTGGAA	CCATTGCCAA	ACACCTCAA	TCTGAAAACA	3480
TTGTGATGG	CAAAGGTTT	GAGCGCTTGA	TCGTTGAAAA	ACCATTGGT	ACAGATTACG	3540
CAACTGCAAG	CAAGTTGAAT	GACGAACTCC	TAGCAACATT	TGACGAAGAA	CAAATTTTCC	3600
GTATCGACCA	TTATCTTGGT	AAGGAAATGA	TCCAAAGCAT	CTTTGCAGTT	CGCTTTGCAA	3660
ACTTGATTTT	TGAAAACGTT	TGGAACAAGG	ATTTTATCGA	CAATGTTCAA	ATTACCTTTG	3720
CGGAGCGCTT	GGGTGTAGAA	GAACGTGGTG	GCTACTATGA	CCAATCCGGT	GCCCTCCGTG	3780
ACATGGTCCA	AAACCACACT	CTACAAC TTC	TTTCGCTCCT	CGCCATGGAC	AAACCAGCAA	3840
GCTTCACAAA	AGACGAGATT	CGTGCTGAAA	AGATTAAAGT	CTTTAAAAAC	CTCTATCATC	3900
CAACTGATGA	AGAACTCAA	GAACACTTTA	TCCGTGGGCA	ATACCGCTCT	GGTAAGATTG	3960
ATGGCATGAA	ATACATCTCT	TATCGTAGCG	AGCCAAATGT	GAATCCAGAA	TCAACAAC TG	4020
AAACCTTTAC	ATCTGGTGCC	TTCTTTGTAG	ACAGCGATCG	ATTCCGTGGT	GTTCCTTTCT	4080
TTTTCGGTAC	AGGTAAACGA	CTGACTGAAA	AAGGAACTCA	TGTCAACATC	GTCTTTAAAC	4140
AAATGGATTC	TATCTTTGGA	GAACCACTTG	CTCCAAATAT	TTTGACCATC	TATATTCAAC	4200
CAACAGAAGG	CTTCTCTCTT	AGCCTAAATG	GGAAGCAAGT	AGGAGAAGAA	TTTAACTTGG	4260
CTCCTAACTC	ACTTGATTAC	CGTACAGATG	CGACTGCAAC	TGGTGCTTCT	CCAGAACCAT	4320
ACGAAAAATT	GATTTATGAT	GTCTTAAATA	ACAACTCAAC	TAACTTTAGC	CACTGGGATG	4380
AAGTTTGTGC	GTTCATGGAAG	TTGATTGACC	GTATTGAAAA	GCTCTGGGCT	GAAAATGGTG	4440
CCCCACTTCA	TGACTATAAA	GCTGGAAGCA	TGGGACCTCA	AGCCAGCTTT	GACCTACTTG	4500
AAAAATTCGG	TGCCAAATGG	ACTTGGCAAC	CAGATATCAC	CTATCGTCAA	GATGGTCGCT	4560
TAGAATAAAA	AAATTTCCTG	CAAGTTTATG	CcTTGCAGGA	TTTTTGCTTC	TGATTAGATT	4620
AAACCTTCCA	AGAGACCTTT	CATAAAGTTT	TCTGAGTTAA	ACTCTCCAAT	ATCATCGATT	4680
TTTTACCAA	AACCAATCAA	TTTTACAGGA	ATATTGAGTT	CTTCACGAAT	GGCTAGAACC	4740
ACACCTCCTC	GAGCAGTTCC	ATCAATCTTA	GTCAAAACAA	TTCCC GTTAA	AGGTGTGATT	4800
TTCGAAAAAT	CTTTGGCCTG	TACTAGGGCA	TTTTGACCTG	TTGATGCATC	AAGTGCCAAG	4860
AAGGTTTCAT	GTGGTGCTTC	TGGCACAACA	CGTTTGATAA	TACGACCAAT	CTTTTCCAAC	4920
TCAGCCATAA	GGTTATCCTT	ATTTTGACAG	CGACCAGCAG	TATCAATCAT	GAGAATATCG	4980
ATACCTTCAG	TCACGGCACG	TTCCATACCA	TCAAAGACCA	CGCTGGCTGG	ATCAGCTTTT	5040
TCAGGTCCAG	TTACTACTGG	AACATCTACT	CGTCGGCCCC	ATTCAGCTAG	CTGAGCTACT	5100

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GCACCCGCAC GGAAGGTATC TGCTGCAACC AGCATGACCT TCTTACCAGC TTGTTTGTAG	5160
CGGTGGGCTA GTTTTCCGAT AGAAGTTGTT TTCCCAACAC CATTCACACC AACAAAGAGC	5220
ATAACTGTCA AGTTATCTTG GAAGTGGATG CTTTCATCGT AGCTACCATC CTTTTCATAA	5280
AGCTCAACCA ATTTCTCAAT GATGACACGA CGAAGTACAT CAGGTTTCTT GGCATTTTCA	5340
AGCTTGGCTT CGTAACGTAG TTCCTCCGTT AAGTTAGAAG CGACTTGGAC ACCAACATCA	5400
CTCATAATCA GCAGTTCTTC CAGTTCCTCG AAAAATTCCTT CGTCAACAGA GCGGAAGTTA	5460
GCAAAGAAGG CATTCAAGCG GGCACCGAAA CCTGTGCGAG TTTTCTTAAG ACTGCGGTCA	5520
TATTTTTCCT GAACAGTTTC TTCTGTTTGA GGAGCTTCTG GTTCAAGCAC TTCAGAATTA	5580
TTTTCTTCTA CAGTTCCTTC GTGCTCAAGC TTCTCTTCCT CTGGTAATTC TTCTGAGTTT	5640
GGTAATTCCT CTATTTCTTC TTGAGAAACC CCTACAGCTG GCTCTGAATC CTGACTTTCT	5700
TCAACTGTGT CTTGGATTTC CTCTTCTTGG AACACAGCTT GTTCAACAAT TTCAACCTCT	5760
GCTTCTTCCT GAGAACTTC CTCAACTTCT GTGAAGGTAG GATCAACATC TTCAGACAAA	5820
TCAAGATTTT CCAGAGCTTC TTTTACAAC TCTTCGATT TAGGTTCCTC TTTTTTCCG	5880
AATAGACGGT CAAACAATCC CATATCTTAG TTCTCCTTTA GCACATATTC TTCGATAGCC	5940
CAGGCGACAG CTTCTCATC GTTGGTCATC GCGTCACTA CATTTGCGGC TGCCTTTACT	6000
TCAGGAACAG CGTTTTGCAT AGCAACACCA AGACCTGCCC ATTCAATCAT AGAGAGGTCA	6060
TTGGCCTCGT CACCACAAGC CATCACTTGA CTTTGGTCGA TTCCAAGATG GCTGATTAGT	6120
TTTGCCAAAC CTGTTGCTTT ATGAACATTC TTTGGTGACC ATTCTAGCAA CATTTCACGT	6180
GATTTAAAGA TTTTCATATTG GTCAAACAAT TCTGGAGAAA TCTTCTGAAT GGCTGCATCC	6240
AAGGGTTCTT GAGCAAAGGC AGTCACGCAT TTGTTGTAGG TCATTTGACT AGATAAGTCT	6300
TCAAAGTCCA CTGGAACAAA GGTCAAAGCT GGATTGAATT TGGCATAAAG ACTTCTTTGG	6360
TCCGATTGGA TTTGATAAAC TGTTCCTTCT GAGATGCCAT CAAGAGGCAG TGATAATTC	6420
TCTGTTTCTT CATACAAACG TGCCACATCA TCATATGAAA AGACTGTTTT ATCAAGGATT	6480
TCTCCTGTAT TTTTCTGAAC TAATCCACCA TTAAAAGTAA TGGTATACTC ATCTTCCTGA	6540
CCGTCACTCC CTAACATCG GAGAAAGAAA TCCATGGCTT TTAAGGGACG ACCAGTTGTC	6600
AATACGACCT TGATACCACG ATCACGCGCA GCTTGCAAGG TTTCTTGGT ACGATCCGTC	6660
AGCCTTTTAT CAGTAGTCAG CAAGGTCCCG TCCAAGTCCA ATGCAATCAA TTTTATATCT	6720
GCCATTATAA GCCCTCCATA TAAGCTATAA CCGACCGTTC CTTATGGTGA CCAATCACAG	6780
TCTTTGCTAA TTCTAAAATT TCAGGTCGTG CATTTTCAGG AGCTACAGGA TGTCCACAA	6840
CCTGCATCAT ATGTAAGTCA TTAAGATTGT CTCCAAAAGC CATGACCTGA TCCATTGTGA	6900

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TACCAAGTTT TTAACTAAT TCAACAATGG CCACTCCCTT ATCGACATAG TCCAGAACAA	6960
TATCAATGGA TTCAAAGCCA GTTGTCATGG CCTTAACACC AGGAACGTTT TCGTTTACCC	7020
AAGCCTCCCC ATCTTCCAGC GTTCTCTCTG TGAAGTTGGT TGTAATTTG AAAATGTCAT	7080
CTGTGATATC TTCCAAACTC GCTACTTTT GGATATTTTC ATTATAGTGC TGA CTCACTT	7140
TCAAATAGGT CTCATCAACC GTATCTAGAA CATATGAACC CTTCTTACCC GTCAAGAGCA	7200
GTTTATTGAT ATCTACATAA GGTGAAGTTT TCAGCTTTTC AAAAGTTGCC AGATAAAAGT	7260
CACGAGACAT AGTCGCTTCA TACAAGTCCT GACCTTGATA CTCTACCAA CTGCCATTTT	7320
CCGCGATGAA AATAATGTCA TCACGAACAC CAGCAAATAA TTTTCTAGA GACAGAAATC	7380
CCCACCCGA AGCTACCGCA AAGTAAATCC CTTTTCCTT GTAGGAAACC AAGAGAGACT	7440
TGAGACGATC CATATCAAAG CGTCCATTCC CATCTAGGAA GGTCCCGTCC ATATCCGTTG	7500
CTACTAGTTT AATTGTCATC CTTCAATACT TTCTAAATCT TTAACTTAA CTGAAACAAT	7560
CTTTGAAACA CCCGATTCTT GCATGGTCAC TCCATAGATG GAATCAGCCG CTGCCATGGT	7620
TCCCTTACGG TGGGTTACGA CGATGAACTG GCTGTCCTTG TCAAAGCGGT TGAGGTAATC	7680
CCCAAAACGT TTAACATTGG CTTCAATCCAG CGCAGCTTCC ACCTCATCCA AGATAACAAA	7740
TGGAATAGTC TTGACACGAA TAATGGAGAA GAGCAAGGCA AGAGCCGATA GGGCTTTTTC	7800
ACCACCACTC ATGAGATTAA GAGACTGGAT TTTCTGCTT GGTGGTTGGA CAGAAATTC	7860
AACCCAGCT GTCAGCAAGT CTCCTTCAGT CAAAATGAGG TCAGCCTGAC CTCCACCAA	7920
CATCTGCTTG AAGGTCACTT TAAAGGACTC ACGAATGACC TCAAAGGTTG ATTTAAAGCG	7980
TTCTTGACC TCATCATCA TCTCTGTAAT GGTCTCAAGG AGCAGGTTT TCGCAGACAA	8040
AATATCATCA CGTTGGCTAT TTAGGAAATC CAGACGGTTG TGAACCTCTT CGTACTGTTT	8100
AATAGCGTCT AAATTGACAG GACCCAGTGA GCGTATAGCC TTCTCTAAAT CCTTAACTTC	8160
TTGCTCTGCC AGATTGAGAT TTTCCAACTC ATGCGCCTTT TCTAAAGCTT CTGTGTAGCT	8220
GATCTGGTAC TGCTCTGTTA ATTGACTTTG TAGATGGCGC AAGCGCTCGC TAACCTTTTC	8280
TTTCTTGGCT TCAGCACGAG TTTGCTTGCG AATCCACTCT TCATTCTGCT GCGGAGCCTG	8340
ATCCAAATGA CTAGCAATAT CATCCAGTTG ACCCTCAATA TCATCCAAC CAACTGCTT	8400
GCGAATCAAA CCTTGTGGA GATTTGTTTT TTGAGTTTTG GATTCTTCCG CCTGTTGACT	8460
GAGCAATTCT GTATCAACCT TCTCAAGATT ATCAATCTTT TCTTGAAGAA GCGCTGGAT	8520
TTCTCTTGT TCAAAATCAA GATTGTCCAA TTCCTTGCTT AAGCGTTCAA TATCAGCAAC	8580
TTCATAACGT TTTTGCCCTT GCAGTCTGT CTTAAGCAAA CGAGCTTGGC CTAGCTCTTC	8640

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CTGCAAGTTT TGATAGCGTT CTTGGATGGC ATTTTGTGTTA GACTTAATCT CTTCAATCTC	8700
AGCTTCCAGA TTTTGCTTGT CACTGGAGAT TGCAGCAAGA CGCTCTTGGC AGTTTTCCTT	8760
ATCCGCTTGC CAATCTCCCT CGGAAAGACG ATCTATTTCC TCTTCTTGA GTTCCAAAG	8820
AGTTTCCAGT TCTTCAACTT GCTGACTAGT TTGCTGATAA GCGAGGAACA AGCCTTGCTC	8880
CTGAATACGT GCCTGCTCTC CTTGAGATTT AATAGCTTCT AATGACTCGG TCAATCTGGC	8940
CATCTCATCT TGCAAGGTCT TCAAAGTCGC CTCTTCTGAA CCCAAGCTTG CTTCTTCTTC	9000
AGCAATTTCT TTTTGTAATT GCTCCAGTTC TGGCTTGATA AAAATGCTGT TATTCTGGCG	9060
ATTGGCACCA CCTGCATAAG AACCACCTGT GCGCAACTCT GTCCCATCCA ATGTCACCAT	9120
ACGAACCTGA TAACGAACCT GCGGAGCTGC TGCACGCGCA TGTTCTACGG TATCAAAGAT	9180
AGCCGTCGTA GCTAGCAAGT TCTTGAAAAT GGCTTCCAGT CTAGTATCAA AAGTCACCAA	9240
CTCATCTGCC ATCCCAAGGA AACCTGGGCT TACAGCGATA GCATCTTGGT TCTGACTAGA	9300
AATCGTACGC GCCTTGATAG TGGTCAAAGG AAGAAAGGTT GCACGACCGG CTCTGTTCGG	9360
TTTAAGGAAG TCAATAGCCT TGGTTGCCGA CTCTTCATCT TCTACGATGA TATGCTGGCT	9420
ACTTGCCCTT AAGGCAATCT CTAGGCGAGT TTGATAATAA ACATCAAAGG TCAGATGCTC	9480
ACTGACTGCA CCAATAATCC CACCTAGGCG ATCTTTTCTT TGGAGAACAC TCTTAACACC	9540
TGCATAAAAG TTACTATGAT TTCTCAGGAT ATTTTCCAAA CTTTGAGCTC TGGCCTGCTT	9600
GT'TTTTGAGA TTATCCAGAC GGTCAAAGAG TTGGCTTTGT TGAGCTTGAT AGGAAGTTT	9660
CTGCTCCTCT TGCTCCTTGG CAATAGCTTG GTAGTCAGCC AATAATTTCT GAACCTGCTC	9720
CTTGGCAGTT TCAAGCTCTT CCTTTTGCTG ACTAGCCTTC TCTTTAGCTA TAGCTAATTG	9780
CTCTTTCAGC TTTTCTAGTT GATCTGCTTG TTTTGTGAGAA AGCTGACGAC TATTTTCCAA	9840
CTCATTCTCA ATACGGGTCA ACTGGTTTGA GACATCCGCT TCTTCTTGTA AAAGAGCTAC	9900
AAAGCGTTCA CGTAAGAGCT CAATCATCTG ATCAGGATCG TCTGAGAAAG CCAGCAATTC	9960
AGCTTCTAAA CGATTGAGTT TTTGATTATT TTGGACTAGA TTTCCCTCTA ACAGAGCTAA	10020
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CAAACGGGCT TGTGCCTCCT GTTGATTCAA GGCCACTTGC TCGGACTCCA GTTTCGATAG	10140
GGCTAATTTT CTTTCTAAAT CACTAATCAG ACTAGTCAAG TCCATCAAAC TGCCTTGGTC	10200
TTTGGCCATT TCAGCCTGTA AATCTTGGCG TTGCTTTTGA AGAGTTTGAT TTTCTTCTTC	10260
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TTCTGTGAC TCTAGTTCAG CCTTATTTTC CTTGATTTGA GCAACCAGAA CATCTAAATA	10380
AATAGCCTTA CGTTGTCCTT CCAAGTCTAA AACTTACGG GCATTCTCAG CTTGCTTCTC	10440

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AAGAGGCTTG	ATTTGATTAT	CCAACTCGTA	GATAATGTCC	TCTAAGCGGT	CCAGATTATC	10500
CTGAGTTTGC	TGCAGTTTAC	TCTCGGTTTC	TTTCTGCGA	GTCTTGATTT	TTAAACTCC	10560
AGCAGCTTCT	TCAAAAATAG	CTCGTCGTTC	CTCAGGCTTG	GAATTAAAA	TCTCCTCAAC	10620
CTTCCCTTGG	GAAATAATAG	AGAAGGAATC	TCGTCCCAAT	CCAGTATCCA	AGAAGAGGTC	10680
ATGAATATCA	CGCAGACGGA	CTTCTTGCC	GTCAATCTTG	TATTCGCTAT	CTCCACTACG	10740
ATAGACATGG	CGTTCACCC	TGATTTCTTG	ACCTGCATCC	TTGATAAATC	CGTCATGATT	10800
ATCCAGAGTC	ACAACTACAG	AAGCATAATT	GAGCGGTTTG	CGACTTTCGG	TTCCAGCAAA	10860
GATGATATCC	GGCATCTTGC	CCCCACGGAG	ACTCTTGACA	CTAGACTCCC	CCAAAGCCCA	10920
ACGCAGACTT	TCTGTAATAT	TGGACTTTCC	AGATCCATTG	GGTCCAACAA	CTGCCGTCAC	10980
ACCTTGGTCA	AAAACGACCT	TGGTCTTATC	AGCAAAAGAC	TTGAACCCCT	GAATTTCGAT	11040
TTCTTTTAAA	TACATGAATC	CAGCCCCTTC	TCAACGGCAT	TTTTTGGCAGC	TTCTTGCTCT	11100
GCTAATTCT	TAGAACGACC	TTGGCCTTGA	CCGATGCTCT	TACCTTCAAC	AAGAACTTCT	11160
ACATCAAAAA	CCTTATCGTG	AGCAGGCCCT	GTTTCAGAAA	TCACCTGATA	ACGAATAGCC	11220
ACATCACCAT	TGACCTGAAG	CAACTCTTGG	AGATGGGTTT	TATAGTCTGT	AATCATCTCA	11280
AACTCGCCTG	CTTCAACCTT	AGGAATCATG	ACTTGATAGA	TAAATTCCTT	GACCTTGGCC	11340
ACATCCTTAT	CCAAAAGAAG	GGCACCAAGA	AAGGCTTCAA	AGGCATCACC	AAGAATGGTG	11400
TCACGATTGC	GACCACCTGA	TTTTTCTTCC	CCTTTACCCA	ACTTGATAAA	CTGGTCAAAAC	11460
TGGCAATCAC	GCGCAAAACC	AGCTAAACTC	TCCTCACGGA	CAATCATAGC	ACGGAGTTTT	11520
GATAGGTCAC	CTTCAGGCTT	TTTAGGATAT	TTTTTATATA	GATATTCTGA	AATCAATAAC	11580
TGTAGAACAG	CGTCTCCTAA	AAATTCCAAG	CGTTCATTGT	GTGAAATTTT	TAAGAGGCGG	11640
TGCTCATTTG	CATAACTCGT	ATGAGTAAAG	GCAGTTTCCA	GTAACTTTTT	GTCTGCAAAAT	11700
TCGATTGCAA	AATGATTCTT	TAGTACAGTT	TGTAATTCTT	TCATACCAAC	CTCTTTCTAA	11760
CTGATAATAG	TCCTTTTTAT	TATATCAAAA	AAAGCCCCCT	GAGTCACTCT	AAAACGGGAC	11820
TGGAAAGCAT	TTGGGAATTC	TTTAGACAGA	GATTCTCAGT	TTTAGCGGCA	AATTTGGGTC	11880
AGGATAAAGA	AAAAAGCCCT	ATTAAAGGCT	TTTAGGATG	TTTACATCCA	CCCTGAGGGA	11940
ATCGAACCCC	CATCTCAAGA	ACCGGAATCT	TACGTGATAT	CCATTACACT	AAGGGTGGAA	12000
ACTTGTTTTA	TTATAACAGA	AATTTGCTCT	AATAACAAGT	TTTTTGGTCA	AAGACCCCGT	12060
CTTAGTGGGA	AGCATCCCCA	TTCCAGATGG	AGTTTTTTCAC	GATCACATAA	TCAACGTGTT	12120
TAAGGTCAGC	AACCTGACGT	CCACCTGCAT	AAGAAATAGC	ACTTTGAAGG	TCTTGTTCCT	12180

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TCTCAGTTAA AGTGTCTTGC AGATGACCTT TAGCAGGAAG CAAGATACGT TTGCCTTCCA	12240
CATTTTGTGA AGCACCTTTT TGATATTGTG AGGCTGAACC ATAATATTCT TTGAACTGTT	12300
CACCATCGAC TTCAATCGTT TTCCCTGGAC TTTCAATGTG TCCTGCAAAG AGGGAACCAA	12360
TCATGATCAT GCTAGCACCG AAGCGGATAG ACTTAGCAAT ATCACCCTGA GTACGAATTC	12420
CTCCATCAGC GATAATCGGT TTACGCGCAG CCTTGGCACA CCAGCGTAGA GCAGCCAACT	12480
GCCAAACCACC TGTACCAAAA CCAGTCTTAA CCTTGGTGAT ACAAACCTTA CCAGGACCGA	12540
TTCCGACCTT AGTAGCATCC GCACCAGCAT TTTCCAATTC ACGCACAGCT TCTGGTGTTT	12600
CCACATTTCC AGCAATGACA AAGGTATCTG GCAATTCTTT CTTGATGTGT TGAATCATAG	12660
AAATCACGCT ATCCGCATGA CCATGAGCAA TATCAATAGT GATATACTCA GGAGTATCAG	12720
CCTTGAGCTG GCTAACAAAA TCATACTCAT AATCCTTAAC ACCGACAGAG ATAGAAGCAA	12780
TGAGCCCTTG ATTGTGCATT CGTTTAATAA AAGGAATGCG TCCTGCCTCA TCAAAACGGT	12840
GCATAATGTA GAAGTAACCA CCTTTAGCCA GTTGCTCTGC TACATTTTCA TCCAAAATCG	12900
TCTGCATATT CGCTGGCACA ACAGGTAGTT TAAAGGTGTG ATTTCTTAAA GTGACACTTG	12960
TATCCGCTTC TGCACGGCTT TTAATGACAC ATTTATTTGG AATCAATTGA ATATCTTCGT	13020
AATCAAAAAT TGGAATTCA TTTAACATAT CGATGCTCTG TTTCTTTTGT AATGACCTAC	13080
CTATGCTCTT GCATCACTAC GCCTTTTCCG ACGTTTCCTG G	13121

(2) INFORMATION FOR SEQ ID NO: 127:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 9578 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 127:

CCGAATGCAA TCTTTACGGT TGAACCTGAA AATGGACATC AGATTTTAGC AACAGTTTCT	60
GGTAAAATTC GTAAAACTA TATTCGTATT TTAGCGGGAG ATCGTGTTAC TGTCGAAATG	120
AGTCCATATG ACTTGACACG TGGACGTATC ACTTACCGCT TTAAATAATC GAAAACTTG	180
GAGGGATAAG AAATGAAAGT AAGACCATCG GTCAAACCAA TTTGCGAATA CTGTAAAGTT	240
ATTCGTCGTA ATGGTCGTGT TATGGTAATT TGCCCAGCAA ATCCAAAACA CAAACAACGT	300
CAAGGATAAG ATAGAAAGGA GAAAACATGG CTCGTATTGC TGGAGTTGAT ATTCCAAATG	360
ACAAACGCGT AGTAATCTCA TTGACTTATG TTTATGGTAT CGGACTTGCA ACATCTAAGA	420
AAATTTTGGC TGCTGCTGGA ATCTCAGAAG ATGTTCTGTG ACGTGATCTT ACATCAGATC	480

877

AAGAAGATGC TATCCGTCGT GAAGTGGATG CAATCAAAGT TGAAGGTGAC CTTCGTCGTG	540
AAGTAAACTT GAACATCAAA CGTTTGATGG AAATCGGTTC ATACCGTGGT ATCCGTACCC	600
GTCGTGGACT TCCTGTCCGT GGACAAAACA CTAAAAACAA CGCCCGCAC TCGTAAAGGTA	660
AAGCTGTTGC GATTGCTGGT AAGAAAAAAT AATATAGGAG GTAAAAAGTCT TGGCTAAACC	720
AACACGTAAA CGTCGTGTGA AAAAGAATAT CGAATCTGGT ATTGCTCATA TTCACGCTAC	780
ATTTAATAAC ACTATTGTTA TGATTACTGA TGTGCATGGT AATGCAATTG CTTGGTCATC	840
AGCTGGTGCT CTGTTTCA AAGGTTCTCG TAAATCTACA CCATTGCTG CTCAAATGGC	900
TTCTGAAGCT GCTGCTAAAT CTGCACAAGA ACACGGTCTT AAATCAGTTG AAGTTACTGT	960
AAAAGGTCCA GGTTCGTGTC GTGAGTCAGC TATTCGTGCG CTGCTGCCG CTGGTCTTGA	1020
AGTAACAGCA ATTCGTGATG TGAATCCAGT GCCACACAAT GGTGCTCGTC CTCCAAAACG	1080
TCGCCGTGTA TAATCATCGC ATTACACTGC TTTTCGTTTA AGAGGGAGTA ACTAAATGAT	1140
CGAGTTTGAA AAACCAAATA TAACAAAAT TGATGAAAAT AAAGATTATG GCAAGTTTGT	1200
AATCGAACCA CTGAACGTG GCTACGGTAC AACTCTTGGT AACTCTCTTC GTCGTGTA	1260
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GTTTGACACA GTTCCAGGTG TTCGTGAAGA CGTGATGCAA ATCATTCTGA ACATTAAAGG	1380
AATTGCAGTG AAATCGTACG TTGAAGACGA AAAAATCATC GAACTGGATG TTGAAGGTCC	1440
TGCTGAAGTA ACAGCTGGTG ACATTTTGAC AGATAGCGAT ATTGAAATTG TAAATCCAGA	1500
TCATTATCTC TTTACAATCG GTGAAGGTTT TTCTCTAAAA GCGACTATGA CTGTTAACAG	1560
TGGTCGTGGA TATGTACCTG CTGATGAAAA TAAAAAGGAT AATGCACCAG TTGGAACACT	1620
TGCTGTAGAT TCTATTTATA CACCAGTTAC AAAAGTCAAC TATCAAGTGG AACCTGCTCG	1680
TGTAGGTAGC AATGATGGTT TCGACAAATT AACCTTGAA ATCTTGACAA ATGGAACAAT	1740
TATTCAGAA GATGCTTTAG GGCTTTCAGC ACGTATTTTG ACAGAACATC TTGATTTGTT	1800
TACAAATCTT ACTGAGATTG CTAAGTCAAC TGAAGTGATG AAAGAAGCTG ATACTGAATC	1860
TGACGACCGT ATTTTAGATC GTACGATTGA GGAACGAC TTGTCTGTGC GTTCATACAA	1920
CTGTTAAAA CGTGCCGTA TCAATACTGT GCATGATTG ACAGAAAAAT CTGAAGCAGA	1980
GATGATGAAA GTACGAAATC TTGGACGCAA GAGTTTGAA GAAGTGAAAC TCAAATCAT	2040
TGATTTGGGT CTTGGATTAA AAGATAAATA AAGGAGGAAT ACATGGCTTA CCGTAAACTA	2100
GGACGCACTA GCTCACAACG TAAAGCAATG CTTGCGGATT TGACAACTGA CCTTTTGATC	2160
AACGAATCAA TCGTGACAAC TGAAGCTCGT GCTAAAGAAA TCCGTAAAAC TGTGAAAAA	2220

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ATGATTACTC TAGGTAAACG TGGTGATTG CATGCACGTC GTCAAGCAGC TGCTTTCGTA	2280
CGTAATGAAA TCGCATCTGA AAACATATGAT GAAGCAACTG ATAAGTACAC TTCTACTACA	2340
GCACCTCAAAA AATTGTTCTC AGAAATCGCA CCTCGTTATG CTGAACGTAA CGGTGGATAC	2400
ACTCGTATCC TTAACAACTGA ATCAGCTCGT GGTGATGCAG CGCCAATGGC GATCATCGAA	2460
TTAGTATAAA ATCATCAATT TTGTTGAGTG TTATGATGAT GGAGTCTTGT GCTCTTAGTC	2520
TAGCTCTGGT CTACCGCTAG GATTTCGGTC CTAGCGGGAA CACTCATCAT AAGTTGGGAT	2580
AGTAGACGCT TGTTTACGAA ATTGTTTTTT TCTTAAGAAC AACTTCGTAA GCAGGCGTTT	2640
TTGAGTATTT TCGTTAGAAT TATGCTATAC TATTTGAAAA GAATCCTGTT TAATGTTAAG	2700
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AAAGATAAAT CTGGAATTGT TGCAGGTGTT TCTGGTAAAA TTGCAGAATT AGGATTGAAT	2820
ATTGACGATA TCTCTCAAAC TGTCTTGGAT GAATATTTTA CGATGATGGC TGTGTTATCT	2880
AGTGATGAAA AGCAAGATTT TACCTATCTT CGTAATGAAT TTGAAGCTTT TGGGCAAACT	2940
TTGAATGTAA AAATCAATAT TCAGAGTGCA GCGATTTTCG AAGCTATGTA TAATATCTAG	3000
GAGGTCATCA TGGATATTAG ACAAGTTACT GAAACCATCG CCATGATGTA GGAGCAAAAC	3060
TTGATATTTA GAACCATTAC CATGGGGATT TCTCTTTTGG ACTGTATCGA TCCAGATATC	3120
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GTTGGTGATG AAATTGCGGC TGAGTTGGGA ATTCCTATCG TTAATAAGCG TGTATCGGTG	3240
ACACCTATTT CTCTGATTGG GGCAGCGACA GATGCGACGG ACTACGTGGT TCTGGCAAAA	3300
GCGCTTGATA AGGCTGCGAA AGAGATTGGT GTGGACTTTA TTGGTGTTT TTCTGCCTTA	3360
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GCTGAGACGG ATAAGGTCTG CTCGTCAGTC AATATCGGCT CAACCAAGTC TGGTATTAAAT	3480
ATGACGGCTG TGGCAGATAT GGGACGAATT ATCAAGGAAA CAGCAAATCT TTCAGATATG	3540
GGAGTGGCCA AGTTGGTTGT ATTCGCTAAT GCTGTTGAGG ACAATCCATT TATGGCGGGT	3600
GCCTTTCATG GTGTTGGGGA AGCAGATGTT ATCATCAATG TCGGAGTTTC TGGTCCTGGT	3660
GTTGTGAAAC GTGCTTTGGA AAAAGTTCGT GGACAGAGCT TTGATGTAGT AGCCGAAACA	3720
GTTAAGAAAA CTGCCTTTAA AATCACTCGT ATCGGTCAAT TGGTTGGTCA AATGGCCAGT	3780
GAGAGACTGG GTGTGGAGTT TGGTATTGTG GACTTGAGTT TGGCACCAAC CCCTGCGGTT	3840
GGAGACTCTG TGGCACGTGT CCTTGAGGAA ATGGGGCTAG AAACAGTTGG CACGCATGGA	3900
ACGACGGCTG CCTTGGCCCT CTTGAACGAC CAAGTTAAAA AGGGTGGAGT GATGGCCCTC	3960
AACCAAGTCG GTGGTTTATC TGGTGCCTTT ATCCCTGTTT CTGAGGATGA AGGAATGATT	4020

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GCTGCAGTGC	AAAATGGCTC	TCTTAATTTA	GAAAAACTAG	AAGCTATGAC	GGCTATCTGT	4080
TCTGTTGGAT	TGGATATGAT	TGCCATCCCA	GAAGATACGC	CTGCTGAAAC	TATTGCGGCT	4140
ATGATTGCGG	ATGAAGCAGC	AATCGGTGTT	ATCAACATGA	AAACAACAGC	TGTTCTGTATC	4200
ATTCCCAAAG	GAAAAGAAGG	CGATATGATT	GAGTTTGGTG	GTCTATTAGG	AACTGCACCC	4260
GTTATGAAGG	TTAATGGGGC	TTCGTCTGTC	GACTTCATCT	CTCGCGGTGG	ACAAATCCCA	4320
GCACCAATTC	ATAGTTTTAA	AAATTAAGAA	AATAGGAGAA	ATTTTAAGTT	CTATTTAAGA	4380
TTAGACGTGT	ATACTATAAT	CATTAAATAA	AGACCTCCTA	ATATTATTTG	AAACAGATAA	4440
CACTGAATTA	GTTTGAATTT	GATTTTCATC	TAATATCTTT	ATTTAATGAA	CTCCTAAACT	4500
TTTTCATAAT	AATCTCCTTC	AAAAGTCGCC	TGTATGGGTG	GCTTTTATTT	TATCATTCAT	4560
GATATAATAG	AAGCAAACGG	AGGACGGAAA	ATGGTAAAAG	TACGATTGTA	TTTGGTACGT	4620
CATGGCAAGA	CCATGTTTAA	CACGATTGGT	CGCGCGCAAG	GTTGGAGCGA	TACTCCCTTA	4680
ACTGCTGAAG	GTGAACGAGG	GATTCAAGAG	TTAGGAATCG	GTTTGCAGAG	ATCTGATCTA	4740
CAGTTTGAGC	GTGCTTATTC	GAGTGATTCT	GGTCGTACCA	TTCAGACCAT	GGGAATTATC	4800
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GTCAGCCATG	GAATGACTAT	TGGAACCATT	GTTTATCTGA	TTAATGGCAT	GCATCCGCAT	5160
GGTCTGGATA	ATGGTAGCGT	GACAATCCTT	GAATATGAGG	ACGGCCAGTT	TAGGGTTGAA	5220
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TAATCAGTCT	AGACTTGCTT	GCCATGAGCT	AGGGATTTGA	TAAGAATATC	AAGATAAGAA	5340
AAAACAGCCG	AGGGCACTCC	TTTCGGCTGT	TTTGTATGTG	GAAAACTAAA	GTGTAATGCT	5400
ATTGCTTTTA	GAGATTTTCA	TAAACAAGAG	CAAGGAACCT	ACTGTTAGAA	CAGTCAGGAT	5460
AGTTGACAAG	GTTGCGGCTA	CACCGTAATT	TCCTCTGAGA	ACCTCTGTAT	AAATAGCTAC	5520
AGTCATTGTT	CTTGTTTTGA	CATTGTAGAG	GAGGATAGAA	GTAGAGAGTT	TTGAAATCAT	5580
TGTGACTCAA	GATAAGATGG	CTCCAGAAAT	GATACCAGAT	AGCATCATTG	GAGTTGTAAT	5640
CTTAGCAAAG	GTATTGAGAC	GACTACTTCC	TAAGCTTTCA	GCAGCTTCTT	CAATACTTGG	5700
TGCTATTTGT	TGTAAGCTAG	CAACAGATGA	GCGAATAGTA	TAAGGTAATC	TTCTGGCAGA	5760

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TAGAGACATA ATCAAGATGA AAGCAGTCCC TGTAATCATA AGAAATCCAC TTCCAAATAG	5820
ACCAGTATTG AAGGAAGAAA TGAAGGCAAT CCCTAGAACG GTTCCTGGTA CAATATAAGG	5880
TACCATACTG AGGCTGTCAA TTAAGTTTGT AAACAAATTC CGTTTCTAA CGGCTAGGTA	5940
GGAGATAAAT GTCGCAAATA GAACAAC TAG AACTAAGGCA ATCAAAGGGA TACGAATGGT	6000
ATTGAAAATA GCAGATCCCA TACGATGGAA AGCTACCTTG TAACTGTTTG GAGAATAACC	6060
TTTAACAGAT ACCATACCTG ATGTTTTTAG GAAAGAGGTA TAAATTAAGT AGATTTGAGG	6120
TAAAACAGAG ATAAAGATAA TTCCGTAGAC TGTTGCATAA ATGGCAGCCA TTTTTCCTTT	6180
TGTAGTTTTT TTAGGCTCAA TTGGATGGAG CAGATTCATG CTGAAACTGT AGCGGTTTGC	6240
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CCCTTCGCCA ATCAACATAG GCGTTCCAAA GTCTGAGAAT GCTCTCATAA ATACAAGCAA	6420
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CCGAAGGACC CCATGCTTTC AGCTGCTTCA AGTAGAGAAT TGTCAATACT GTTCATTGTT	6540
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GAAGCAATGA TAATCAATAT TTGTAGAAAT TTCTTCCCTT TGAAGTCATA CATAGAGAAG	6780
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TAATTTTTGC GTATTGATTC GTAGACGAAT ACGATTGCCT TTTTGTAGAT CTCTTCAAA	7140
AGTTGATTCT TCACTAACTT GAATTTTGA GGCAAAACCT GTCTCAATGA AATAATCCGT	7200
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GATAAACTCT TCGGGACGAA TGCTTACATG AATAGCTTGC TCCTCAACCT GATCAAGAGC	7320
TGGCATTCGA AGGGCATAGC CATCTGAAAA GACGATATAA GCGCCGTCCG TCCGTTTTTC	7380
AAGATTGGCA GGGATAATAT TTGTGCGTCC GATAAAGGTT GCCACAACT CATTAGCTGG	7440
TTTATGATAG AGTTCTTTTG GTCGGCCGAT TTGTGGATC ACCCATCTT TCATAACAGC	7500
AATTTGGTCT GAAATAGCCA TGGCTCTTC TTGGTCGTGG GTTACATAAA CAGTTGTAAT	7560

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TCCCACCTTCG	TGTTGGATTT	CTCGGATGGC	TTGACGCATA	TCCAAGCGAA	GTTTGGCCTC	7620
CAGATTACTA	AGTGGCTCGT	CCATGAGGAG	AACACTTGGA	TTAACCGCTA	AGGCGCATGC	7680
CAAGGTGACA	CGTTGTTGTT	GTCCACCACT	GAGTTTATCG	GGCTTTCGAT	CCGCATATTG	7740
AGCAATTTGC	ATGAGTTCAA	GATACTTGTT	GGTCTGTTGA	ATCAATTCTT	CTTTTGGAAC	7800
CTTCTTTTGC	ATAAGACCAA	AAGCAACGTT	GTCTCGGACA	GTCAAATGTG	GGAAAATAGC	7860
GTAGTTTTGG	AAAACCATCC	CGATATTGCG	TTTGCTGGGT	TCCATATTAT	TGATTTTGT	7920
ATCATCGAAG	TAAATTTCTC	CACCTTCGAT	ACTGTTGAAA	CCTGCAATCA	TACGAAGAAG	7980
GGTCGTTTTC	CCACATCCTG	AAGCTCCAAG	AAGGGTAAAG	AGACTTCCTT	TTGGAATGT	8040
AATGTTCAAA	TTCTCAATAA	CAGGGACATC	GTGGTAGATT	TTTTTGCGCT	TAATAATTTT	8100
GATCTCACTC	ATAGTGAACC	TCTTTTACTG	TTTAGATTGG	ATATCTGTAA	AGACTTCGTT	8160
GTATTTCTTA	ACGATATCTG	ATTTATTCTT	GATGACATAA	TCATAATCTT	CAGTGAGTGT	8220
TTTGATTTTG	TCAATTGGTT	TCATGTTTTC	GCTTGTTTTA	GCATTTTTAC	GAACAGGACG	8280
GTTAGTAGTG	GTGTACCAA	GTGTATCTTG	TACTTCTTGA	GAGATAATAA	AATCGATAAA	8340
TTTCTTGGCA	TTTTCCATAT	TTTTAGATTT	TTTAACGATA	GCAGCACTAG	CAGGTAGGAA	8400
GACGGTTCCT	TCTTTTGGAT	AGACTACCTT	AATGTTAGCT	CCGTCATTTA	AGAGTTTAAC	8460
TGCTGGATCT	TCATAAGAGA	GACCAACAGC	CATTTCTCCA	TCAGCGACTA	CTTTATAGAC	8520
ACTAGATGAA	CTTGAACCGA	TTTTACCATC	AATAAGTGTG	AAAAGATCTT	TTACATAAGA	8580
CCAAGCCTTA	TCATCTTGT	AACCACCTTG	AGCTTGTAGC	ATATTTGTTA	ATTGAGCAAA	8640
GGCGCTAGAA	GAGTTTGCTG	GGTCAGCAGT	TGCGATTTTT	CCTTTTAGTT	CAGGTTTGAA	8700
AAGATCGTTA	TATCCTTCGA	TGTTCATGCC	TTTAGTTAAA	TCAGGGTTGA	CGATTAATAAC	8760
ACTACCATCT	AGTGTATAAG	GACTAGAGTA	GCCAGTTGTG	TTTTGATATT	CTTTGATAAC	8820
ATTATCATTT	TCTTTTGAAG	TATAGTTTTC	AAAGAGTTCT	CCGTGGGTAG	TATATTGTGT	8880
ATAAGAACCA	CCAAAGATAA	CATCAGCTAC	AGGAACCTCT	TTTTCTGACT	CTAGTTTTTT	8940
GAAAAGTTCT	CCAGTACCAG	CTTGAATCAG	TTCTACTTTG	ATACCATATT	TTTCTTCAAA	9000
GGCAGGAATA	GTTGCTCCAA	TTAAGCCCTC	TGAGTTTGGT	GAATAAACGA	CTAGCGAACC	9060
GCCGTCTCCT	TTATCAGATG	AACTGTCATC	GGCAGATTCA	TTAGAAGAAC	AAGCAGCATA	9120
ATACATCCAT	TTCTTTTCA	TGATGGATAC	CTCCGTTGTG	TTATTTAAGT	TTATTTTAAA	9180
ACAAATGTAAG	CGTTTTTAAA	ACATACAATT	CTATTCIATA	GTGTATTGAA	TCTATAACAG	9240
TACACTTTGA	CTGCTAAAAAT	ATTTCTATAA	ATTAATTGGA	CTTTCCTGAT	AGAGATGTTT	9300

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ACATCTTATT TCAATTCACT ATATTAGAGT AAAATTCTCT AAAAAAGAA GAATAGCCTA	9360
TTTFACTATT CTTCTGAGTG ATTTCAATTC CTTTGGGGAA ATATGGAGAT ACTTTTAA	9420
TCCTGACAAA TGGTTGTTTC TTTTCTAAA TCGGTGATAC TGTATCGGAG AATGCCGCTG	9480
AGGTCACAAA GGCTGCGATA GAGCTTCTAT GGAGAATTTC TTTTGGGAGA GATTTTAA	9540
AGGAATGAGA CATCCGCTAC CTCCTTGAA GGTTTTG	9578

(2) INFORMATION FOR SEQ ID NO: 128:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 13440 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 128:

CGGGCTGTG TGACGATTCT TATTTCTATC TGTGTTATCT TTTTGGGAAC TATTTTGGGT	60
GTTGCTCTGG CTTTGGGCA ACGTTCAAAG TTAAACCGC TTGTTGGTT GGCCAACTTG	120
TACGTTTGA TTTCCGTTG GACACCGATG ATGGTTCAA TTATGATTGC CTTTGTCTT	180
ATGCATATCA ATGCTCCGAC TATTCAGATT GGAATTTAG GTGTGATT TTCGCTCTG	240
ATTCCAGGGA TTTTGATTAT CTCTATGAAT AGTGGTGCTT ATGTTTCGGA GACTGTTCTG	300
GCCGGAATCA ATGCGGTTC AAAAGSTCAG CTAGAAGCG CTTATTCGCT AGGGATTCTG	360
CCTAAAAATG CGATGCGTTA TGTGATTTG CCACAAGCAG TCAAAAATAT CTTGCCAGCA	420
TTGGGGAACG AATTATCAC CATTATCAAG GACAGCTCCC TCTTATCAGC TATTGGGGTC	480
ATGGAGTTGT GGAATGGGGC TACAACAGTT TCTACAACA CCTATCTACC TTAAACACCA	540
CTTTTATTG CAGCATTTTA CTACTTGATT ATGACCTCTA TTCTGACAGT AGCCTTGAAA	600
GCTTTTGAAA AACATATGGG ACAAGGAGAT AAGAAATAAT GACAGAAACC TTGATAAAAA	660
TTGAAAATTT ACATAAATCC TTTGGAAAGA ATGAAGTATT GAAGGGCATC AACCTCGAGA	720
TTAAAAGAGG AGAAGTTGTC GTTATCATCG GTCCTTCAGG GAGCGGAAA TCTACCTTGC	780
TTCCGCTCTAT GAATTGTTG GAAGAAGCAA CCAAGGGGAA GGTATCTTT GAGGGAGTCG	840
ATATTACGGA CAAGAAGAAT GACCTGTTG CCATGCGTGA GAAGATGGGC ATGGTTTTTC	900
AACAATTCAA TCTCTTCCT AATATGACTG TGATGGAAA TATCACCTTG TCCCCTATCA	960
AGACCAAAGG TGACAGTAAG GCCGTTGCAG AGAAAAGAGC TCAGGAACCT TTGGAAAAAG	1020
TTGGTTTGCC AGATAAGGCA GACGCTTATC CACAGACTTT GTCAGGTGGC CAGCAACAGC	1080
GGATTGCCAT CGCGCTGGG TTGGCTATGG AACCAGATGT TTTGCTCTT GACGAGCCAA	1140

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CTTCAGCCCT AGATCCTGAG ATGGTTGGAG AAGTTCCTGGC TGTATGCAA GATCTAGCCA	1200
AGTCAGGAAT GACCATGGTT ATCGTAACAC ATGAGATGGG ATTTGCCCGT GAGGTGGCAG	1260
ATCGTGTCAT CTTTATGGCA GACGGTGTGG TTGTTGAAGA CGGAACACCT GAGCAGATTT	1320
TTGAACAAAC CCAAGGACAA AGGACTAAAG ACTTCTTGAG TAAGCTTTTA TAAGTTAGCT	1380
TTGTTTAGCT ATTTGTAGCC AGCTTTAAAC GTTAAAGAGA AGATTAGTGA AAAGCTCAAC	1440
CAGAGCTTTT TCTTATAGTT TAAAGCTATA GGATTGCCTA GGAAAGAAGT GTTAGAGCTA	1500
CATTGTATTT TTTGGTATAA TTAAAGATAT TTGTAAGAAA AGAGAAGTGA TATGACACAG	1560
ATTATTGATG GGAAAGCTTT AGCGGCCAAA TTGCAGGGGC AGTTGGCTGA AAAGACTGCA	1620
AAATTAAGG AAGAAACAGG TCTAGTGCCT GGTTTGGTAG TGATTTTGGT TGGGGACAAT	1680
CCAGCCAGCC AAGTCTACGT TCGCAACAAG GAGAGGTCAG CCCTTGCGGC TGGTTTCCGT	1740
AGCGAAGTAG TACGGGTTC AGAGACCATT ACTCAAGAGG AATTGTTAGA CCTGATTGCT	1800
AAATACAATC AGGATCCAGC TTGGCATGGG ATTTTGGTTC AGTTGCCATT ACCAAAACAC	1860
ATTGATGAAG AGGCGGTCTT ATTTGGCTATT GACCCAGAAA AGGATGTGGA TGGTTTCCAT	1920
CCTCTAAACA TGGGGCGTCT TTGGTCTGGT CATCCAGTCA TGATTCTTTC GACACCGGCA	1980
GGAATTATG AAATGTTCCA TGAATATGGG ATTGACTTGG AAGGTAAAAA TGCAGTCGTC	2040
ATCGGTCGAT CCAATATTGT CGGAAAACCT ATGGCCCAGC TTCTTTTGGC AAAGAATGCA	2100
ACAGTAACCT TGACTCACTC ACGTACTCAT AATCTTTCCA AGGTGGCTGC AAAAGCAGAT	2160
ATTCTGGTTG TTGCAATCGG TCGTGCCAAG TTTGTGACTG CTGACTTTGT CAAACCAGGT	2220
GCGGTAGTCA TTGACGTTGG GATGAACCGC GATGAAAATG GTAAGCTCTG TGGGGATGTT	2280
GATTIATGAG CGGTGCCCC ACTTGCTAGC CACATTACGC CAGTCCCTGG AGGTGTCGGT	2340
CCTATGACCA TTAATATGCT GATGGAGCAA ACCTATCAGG CAGCACTTAG GACATTGGAT	2400
AGAAAATAAG ATAAAAATTT TCTGAGGAAA GTGTATTTTC TATAGCTATA TCTAAAATGA	2460
TAGAAATGAA TATTAAATTT TAGAAATAAG TTTATAAAAG GAGGTTTGCG CCTCCTTTT	2520
GTTGTATAAT GGAGTGAGGT GATTAGATGA TTTTAAAAAT TTATAATGGG GAATATAGTT	2580
TACAATGGGA TGGAATATAC TACTTAGCAC TAATTGATTA TCCAAATATT CAAGAGTGGG	2640
AATTAGAAAA AATTGCTAAA TTTATAGCTT ACGAAAAACT TCATAAACCT CAAACAAGTA	2700
TTGAGTGTGC TGATTCTTGT TTAaaaaaag AAATTTTAGA TTACATCTGT CAGCATCCCT	2760
TTCTGCCACC ATTTACTCCT ACAGATAAAA GAGTAGCCTC GACTTATGAC CTACATAAGA	2820
GGTTAGTGAC TTCAGACTAC TGtagtcata CTACGACTAT AGATGCAGCG ATTTCTATTT	2880

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TTAAACTGG TCGTCTTTTA TCTGCTGTGA AAGCCTTTGG GCGAGATGCT GAGGAGTTGG	2940
TTTGGATAG TCGAAATGCT GCATCTGATC CGATAGATTA TTTTACTAT GTCATGTTAG	3000
GGTGGTCAAA TACAAGTTCT GGTATCGAT TGGCGATGGA GCGTTTATTA GGTCGAGCTC	3060
CTTCAGAGAA AGAATTACAA GACAAGTTTA TTCCTGGAGT AAGTTTTCAT TTTATCTATA	3120
CAGATTGAT TAAAGTTCCT GGTATATTT TTGATGGTTA CCATGCTGTA AAAATTAAGG	3180
ACATGCTTAA TTTATTAAGT GAGTTGTATA TTTGCATTAT TCCAACCAT AATAAGAGCC	3240
AATTTGAAAA TATTATTCCA ACCAAAATAC AAGATAGGGT GTATTATCTT GACTATGCTG	3300
GAGAAGACTT AGAAGAGTGG ACTAAGAAAG TCTATCAAGT TGTTTTAAAA CAATCAGATA	3360
AAGGATAGTT GAGGAAAAAA CGATGAAAGT GATTGATCAA ACCTTACTAG AAAAAGTCAT	3420
TATTGAACGT TCTGTACAA GTCATAAAGG AGACTACGGT CGTCTGCTGT TGCTTGGTGG	3480
GACTTATCCT TATGGTGGTG CCATCATCAT GGCTGCTTTA GCAGCTGTAA AAAGCGGTGC	3540
AGGATTGGTA ACCCTTGGAA CGGACAGGGA AAATATCCCT GCTCTACACA GCCATTTGCC	3600
TGAGGCTATG GCCTTTTCTC TGCAAGATCA GTAATTGTTA CAAGAGCAAT TGGAGAAGGC	3660
AGAAGTTGTC TTGCTGGGGC CTGGTTTACG AGACGATACG TTTGGAGAAA ATCTTGTA	3720
ACAGGTCTTT GCTAGCTTAA AAAAGAATCA GATTTTGATT GTAGATGGAG GGGCCTTAAC	3780
CATCCTTGCT AGGACAAGTT TGTGTTTCC ATCTAACCAG CTTATCTTAA CTCCCCACCA	3840
AAAAGAATGG GAAAACTGT CTGGTATTGC TATTGAAAAG CAAAACGAAG GTACAACATC	3900
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TATTTGGCAA GTTGGCCAGT CTGATTATTA CCAGTTAAAG GTTGGCGGTC CCTATCAGGC	4020
GACTGGTGGT ATGGGTGATA CACTGGCTGG AATGATTGCA GGATTGTCAG GCCAATTTCC	4080
ACAGGCCAGT CTCTACGAAC GTGTGGCAGT AGCAACCCAT CTTCAATTCAG CCATAGCCCA	4140
AGAACTATCT CAAGAAAATT ATGTGGTCTT GCCGACGGAA ATTAGTAATT GTCTTCCTAA	4200
AGTAATGAAA AGATATGTCT AAAATAGTTA GACAAAAAAT GTTGATAATT TGTATCATT	4260
TTCTTAATTC AAAAAAACG AACGTTTAGT ATTCTTCTTG CTAAGAAACT AAATTTGTTC	4320
GTTTTTTTAC TCTGTAAAT CTATTTTGT TAGAGTTGAT TTGGTTTACA TCCGTACTTA	4380
AATTGATTTG TTAGAGCTCT ACTTTTATTA AAAAAATCA ATTTCAAGGA TAAATAAGCA	4440
GTATTCTAAA GGTACTTTTA GATGAAATAA AAGCCTTTAC ATGGTATAAT AGAGGTAGCT	4500
CTTTAATGGA GGTGTTTGAG TGGAAAATCT GAAGAAAATG GCAGGTATCA CGGCTGCTGA	4560
ATTTATCAAG GATGGGATGG TTGTAGGGCT AGGAACAGGT TCTACTGCCT ATTATTTGT	4620
CGAAGAAATC GGTCTCGAA TCAAGGAAGA AGCTTGCGAG ATTACAGCTG TGACGACTTC	4680

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TAGTGTGACC	AGTAAACAGG	CTGAAGGGCT	CAATATCCCG	CTCAAGTCTA	TTGACCAAGT	4740
AGACTTTGTC	GATGTGACAG	TCGACGGGGC	GGATGAAGTG	GATAGTCAGT	TTAATGGAAT	4800
CAAAGGCGGT	GGTGGTGCCC	TTCTCATGGA	AAAGGTGGTC	GCAACACCAT	CAAAAGAATA	4860
CATTTGGGTG	GTGGATGAAA	GCAAGCTGGT	CGAAAAACTA	GGTGCTTTTA	AATTGCCAGT	4920
AGAAGTGGTT	CAGTATGGTG	CAGAGCAGGT	CTTTCGTCAT	TTTGAACGAG	CTGGCTACAA	4980
ACCAAGTTTC	CGTGAAAAAG	ACGGCCAACG	TTTTGTGACC	GATATGCAGA	ATTTTATCAT	5040
TGACCTCGCC	TTGGATGTCA	TTGAAAATCC	AATTGCTTTT	GGACAAGAAT	TGGACCATGT	5100
CGTTGCTGTT	GTGGAGCATG	GTTTATTCAA	CCAAATGGTG	GATAAGGTAA	TCGTTGCTGG	5160
ACGAGATGGA	GTTTCAGATT	CAACTTCAAA	AAAAGGAAAA	TAGAAGGGGG	CATAAGATGT	5220
CTAAATTTAA	TCGTATTCAT	TTGGTGGTAC	TGGATTCTGT	AGGAATCGGT	GCAGCACCAG	5280
ATGCTAATAA	CTTTGTCAAT	GCAGGGGTTT	CAGATGGAGC	TTCTGACACA	CTGGGACACA	5340
TTTCAAAAAA	AGTTGGTTTG	AATGTCCCAA	ACATGGCTAA	AATAGGTCTT	GGAAATATTC	5400
CTCGTGAACA	TCCTCTTAAG	ACTGTAGCAG	CTGAAAGCAA	TCCAACCTGA	TATGCAACAA	5460
AATTAGAGGA	AGTATCTCTT	GGTAAGGATA	CTATGACTGG	ACACTGGGAA	ATCATGGGAC	5520
TCAACATTAC	TGAGCCTTTC	GATACTTTCT	GGAACGGATT	CCCAGAAGAA	ATCCTGACAA	5580
AAATCGAAGA	ATTCTCAGGA	CGCAAGGTTA	TTCTGGAAGC	CAACAAACCT	TATTCAGGAA	5640
CGGCTGTTAT	CTATGATTTT	GGACCACGTC	AGATGGAAAC	TGGAGAGTTG	ATTATCTATA	5700
CTTCAGCTGA	CCCTGTTTTG	CAGATTGCTG	CCCACGAAGA	CATTATTCCT	TTGGATGAAT	5760
TGTACCGTAT	CTGTGAATAC	GCTCGTTCGA	TTACCCTTGA	GCGTCCTGCC	CTTCTTGGTC	5820
GCATCATTGC	TCGCCCTTAT	GTAGGTGAAC	CAGGTAACCT	CACTCGTACG	GCAAACCGTC	5880
GTGACTTGGC	TGTATCTCCA	TTTTTCCCAA	CTGTTTTGGA	TAAATTGAAT	GAGGCTGGTA	5940
TCGATACTTA	TGCTGTGGGT	AAAATCAACG	ATATCTTTAA	CGGTGCTGGT	ATCAACCATG	6000
ACATGGGTCA	CAACAAGTCA	AATAGTCATG	GAATTGATAC	ACTATTGAAG	ACTATGGGAC	6060
TTGCTGAGTT	TGAAAAAGGA	TTCTCATTCA	CAACCTAGT	TGACTTTGAT	GCCCTTTACG	6120
GCCATCGTCG	TAATGCTCAC	GGTTACCGTG	ATTGCTTGCA	TGAGTTTGAT	GAACGCTTAC	6180
CTGAAATTAT	CGCAGCTATG	AGAGAGAATG	ACCTTCTCTT	GATTACTGCG	GACCATGGAA	6240
ATGACCCAAC	GTATGCAGGA	ACGGATCACA	CTCGGGAATA	TATTCCATTG	TTGGCCTATA	6300
GCCCTGCCTT	TAAAGGAAAT	GGTCTCATTC	CAGTAGGACA	TTTTGCAGAT	ATTTCAGCGA	6360
CTGTTGCCGA	TAACTTTGGT	GTGGAAACTG	CTATGATTGG	GGAAAGTTTC	TTAGATAAAT	6420

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TGGTATAAGA TGACGCGCTA TGCTTTGCTG GTGAGAGGTA TCAATGTTGG TGGTAAGAAT	6480
AAGGTCGTCA TGGCGGAGCT TCGTCAAGAA TTGACAAACT TGGGACTGGA AAAGGTTGAG	6540
AGCTACATCA ATAGTGGCAA TATTTTCTTT ACTTCGATAG ATTCCAAAGC CCAATTGGTT	6600
GAAAAGCTAG AGACTTTCTT TGCAGTCCAT TATCCATTTA TTCAGAGCTT TTCTTTACTG	6660
AGTCTAGAGG ACTTTGAGGC GGAAGTTGAA AATCTACCAG CTTGGTGGAG CAGAGACTTG	6720
GCACGAAAAG ATTTTCTCTT TTACACTGAG GGTTTGGATG TGGACCAAGT CATCGCGACA	6780
GTTGAAAGTT TAGAGCTGAA AGATGAAGTG CTTTATTTTG GAAAAGTTGG GATTTTCTGG	6840
GGGAAATTTT CTGAAGAATC CTATTCTAAG ACTGCCTATC ATAAGTACTT GCTGAAGGTG	6900
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AAAAATTAAG TATCGGAGTT GTATCTGTTG TAGTCGGCTT TGATTTCTAG CTCCAGCTGG	8220

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AATTCAGCC AATGAAGTAA AGCAAGATGT AACATCTGAA GTGGTAATAG GTGTGCTAGA	8280
TTCTAAGGAG GAATTGAAAG AGTCAGAAAA TGATGCTCCA AAAC TAGAAA CTCCTCTTAG	8340
AGAGGAGCCA AGACTAGCTC CTCAAACGCT TCCGGAAGCA AGTGAAGTTC TTGAAAACAA	8400
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AATCAAAGAG CAAACTAAGA AACTAGCCGC AGGTTGCTCA AAGCACTGCT TTGAGGTTGT	9960

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GAGATTTTCG	AAGAGTATAA	ACAGAAAGGT	AGAGCGCGTG	TTCTAATTG	AACACGAGTA	10080
GAAAACTTTT	CTAAAAACAA	AAACGAAAGG	ATGGGTAAAC	TGTATTCGCT	GAAGTGAATA	10140
CGGGCGACTC	TCCTCTAAAT	CAAAATTAAG	AAAGGAATTG	ACCCCACCCCT	AAAAGTAGTG	10200
GGAAAAAGAT	AGTTGATCTA	GCGAGCATCG	CTCACTGCGC	CCAACTCCTA	TTTTCCCTTC	10260
GCTTTTGGAT	GGGTTTGGTA	TCTTCTCTCA	TATAAAATAT	AAAATAAAGA	AAGGTAGAGC	10320
GTGTGTTTTG	ATTGTAACAC	GAGCGGAAAA	CTCGGAAAAT	AGATAATCTG	ACTGAAAAAT	10380
CAGCATTTCT	CGTCAGGTC	CTAATTTTCA	GTCGTTTCT	TCTCGCTCTT	TGTATCATAA	10440
ATTATGTCTA	TCCATATTGC	TGCTCAGCAG	GGTGAAATTG	CTGATAAAAT	TCTTCTTCCT	10500
GGGGATCCCT	TTCGTGCTAA	GTTTATTGCG	GAGAATTTCC	TTGATGATGC	TGTTTGTTTT	10560
AACGAAGTGC	GTAACATGTT	TGTTTACACT	GGTACTTACA	AGGGTCACTG	TGTATCTGTC	10620
ATGGGAAC TG	GGATGGGAAT	GCCATCTATT	TCGATTTATG	CGCGTGAGTT	AATCGTAGAC	10680
TACGGTGTGA	AGAAATTGAT	TCGTGTGGGA	ACTGCAGGTT	CTTTGAATGA	AGAGGTTTCAT	10740
GTTCGTGAAT	TAGTTTGGC	GCAGGCGGCT	GCAACCAACT	CAAACATCGT	TCGTAATGAC	10800
TGGCCACAGT	ACGATTTTCC	ACAAATTGCT	AGCTTTGATT	TGCTTGATAA	AGCCTACCAT	10860
ATCGCCAAAA	AACTTGGTAT	GACTACTCAC	GTTGGGAACG	TTTTGTGATC	TGATGTCTTT	10920
TACTCAAAAT	ACTTTGAAAA	GAATATCGAG	CTTGGTAAAT	GGGGAGTCAA	GGCTGTGGAA	10980
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ATGACCATCT	CTGATAGCTT	GGTCAATCCA	GACGAAGACA	CAACTGCAGA	AGAACGTCAA	11100
AATACCTTCA	CTGATATGAT	GAAGGTGGT	TTGGAAACCT	TGATTGCAGA	ATAATTATAG	11160
CCAAAAAGGG	GCTCTTTGTC	AACTGTAGTG	GGTTGAAAAA	AAGCTAAGCT	TGAGAAAGGA	11220
CAAATTTTCG	CCTTTCTTTT	TTGATATTCA	GGGCGATAAA	AATCCGTTTT	TTGAAGTTTT	11280
CAAAGTTCCG	AAAACCAAAG	GCATTGCCCT	TGATAAGTTT	GATGAGATTA	TTGGTCGCTT	11340
CCAGTTGGC	ATTAGAATAG	TGTAGTTGAA	GGGCGTTGAC	GATTTTCTCT	TTGTTCCTTA	11400
GAAAGGTTTT	AAAGACAGTC	TGAAAAAGAG	GATGAACCTG	CTTCAGATTG	TCCTCAATGA	11460
GTCCGAAAAA	TTTCTCAGGG	TCTTTGTTCT	GAAAGTGAAA	AAGTAAGAGT	TGATAGATCT	11520
GATAGTGGTG	TTTCAAGTCT	TCTGAATAGC	TTAAAAATCTT	GTCAAGAAAT	TCTTTATTTG	11580
TTAAGTGCA	GCGAAAAAGTA	GGGCGATAAA	AACGTTTATC	GCTsArTTTA	CGACTATCCT	11640
GTTGGATGAG	TTTCCAGTAA	CGCTTGATAG	CCTTGTAATTC	ATGAGATTTT	CGTTCAAACCT	11700
GATTCATAAT	TTGAACACGA	AAACGACTCA	TGGCACGGCT	GAGATGTTGC	ATAATATGGA	11760

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AACGATCTAG AACGATTTTA GCACACGGAA AAAGCTGTTT AGCCAAGTCA TAGTAAGGAC	11820
TAAACATATC CATCGTAATG ATTTTCACTT GACAACGAAC GGCTCTATCG TAGCGAAGAA	11880
AGTGATTTTCG GATGACAGCT TGTGTTCTGC CTTCAAGAAC AGTGATAATA TTAAGATTAT	11940
CAAAATCTTG CGCAATGAAA CTCATCTTTC CCTTAGTGAA GGCATACTCA TCCCAAGACA	12000
TAATCTTTGG AAGCCGAGAA AAATCATGCT CAAAGTGAAA GTCATTGAGC TTGCGAATGA	12060
CAGTTGAAGT TGAAATGGCC AGCTGATGGG CAATATCAGT CATAGAAAT TTTTCAATTA	12120
ACTTTTGAGC AATTTTGTG TTGATGATAC GAGGGATTG GTGATTTTTC TTACCAGGG	12180
GAGTCTCAGC AACCATCAT TTTGAAsAGT GATAGCACTT GAAACGGCGT TTTCTAAGGA	12240
GAATTCTAGA AGGCATACCA GTTGTTCGA GGTAAGGGAT CTTAGACGGT TTTTGAAAGT	12300
CATrTTTCTT CATTAGACTT CCACAATCAG GGCAAGATGG AGCCTCATAA TCCAGCTTAG	12360
CGATAATTTC TTTGTGGGTA TCCATATTGA TGATATCTAG AATCTTGATG TTTGGGTCTT	12420
TAATATCGAG CAGTTTGTG ATAAAATGTA ATTGTTCCAT ATGATTCTTT CTAATGAGTT	12480
GTTTTGTGCG TTTTCATTAT AGGTCATATG GGACTTTTTT TCTACACAAA AATAGGCTCC	12540
ATAATATCTA TAGTGGATT ACCCACTACA AATATTATAG AGCCCCAAAA GGAAGCCCTT	12600
TATGAATTGT AGGACTTCCT TTTCTTATCC AGAAATTGAT CTAGCTCTCT CTGATTTCTGA	12660
AGAATAGTGA CTTTATGIGA ATATCTTGG CAAAGTTTTT GGTAATTTTC TTTTGTGATT	12720
TTGCGGACGC CCATCCCAA GAATCCATCT GATAAACTCC CACTCAAAGC GTTCAGGGCA	12780
ATCTACCGCC ATACTTTCTC TGACTTTTCC ACGGTATTTA AGATAACGCT TAAAGGCTCT	12840
AAAGAGACAG GTCATGGCG AAAAAATTGAG AAAGATGATT TGGTCAGCTT CTTGCATTCTG	12900
TTCTTGGTAG TAGCACCAAG AATAATTACC ATCGATGACC CAAGCTTTAT GCTTGGTGAG	12960
AAAGTTTTTT ATCTCGGTTA ACATCCATTC GCAGTCACTG TCTTGCCAAC CAGGTTGAAA	13020
TTGGAGTGTG TCCATGTGCA GTTTTGAAT GGAGTAGTAG TTAGATAACT TTTCTGCTAT	13080
AGTTGACTTA CCAGAACCAG AATATCCGAT AATTGCGATT TTCATTTTCT ACCTTTTCCT	13140
ATTTGGAGAC AAAAAACAG CCTCTATGGA CTGTTTCTTA TTTAACAAGT TTAGCTGAAA	13200
GACGAGCTTT ATCGCGGCTT GCTTTGTTTT TGTGAATCAA ACCTTTAGTT TCTGCTTTAT	13260
CGATAGCTGA GCTAGCAGCA CGGAAAAGTT CTTCAGATGG GTTTGCTTCG AAAGCTTTTA	13320
TAGCAGTACG CATAGCTGAT TTTTGAGCTG AGTTCTTTTC GATTCGTCTA ACGTTCAATT	13380
CAGCGCGTTT GATAGCTGAT TTAATGTTTG CCAATGGTCT TACCTCCATA TTTACTAACT	13440

(2) INFORMATION FOR SEQ ID NO: 129:

890

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 8512 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 129:

CCTTTTTC	AAA	CTAGAT	ACTAGTCTAT	CAAAAGTAGG	AAAGGGTTTC	AAGAAAATTG	60
ATTGGAAATT	TTTGAAAAAT	CATAGAACTA	TTAGCTAATC	CCTAGTATTG	AAAAGACTGG		120
ATAGCTTCTT	TCAGGTCATC	TTGTAAACTA	TTTCTCTGGT	CAAGTTGGAC	ATAGACTTCC		180
ACCAGACAGG	ATCTAAAGTT	GGAAAATTG	TAAAAATCCT	CCCTTTCTTC	TATCGGAAAA		240
TCAACAGTTT	TTATCCAAGA	AGCTACTTGT	TCTTGCTCCA	ACTTCCCTTG	TAAAAATAGGT		300
TCATAGATCA	CTCTTGCTAA	ACGCCAATCC	TCATCATCTG	TAAAGCGAAT	CGACATTCTT		360
TTAAATAGTT	GGCCAAGTAT	ATCAAATACT	TCATGAAGTC	TGTTTTTAGG	AAAGTCTGGA		420
TGACAAACCA	CCTCTGTCAG	TAAATCGGCT	CCATGTGCAA	AAGCGTGAAC	CCAACCATAC		480
TGACTTGAGA	AACCCCTTCT	ATCCTTTTCT	TTTGAAAGAT	AGTGCAAGCC	TTGATTTAAA		540
AGGACATTAC	GAATTTCTGG	AGAAGGATTT	CCCAAATGAT	CAACAACCA	CTGGATTTCT		600
TCCTGGTTAT	AATTIGGTTT	TTCTCTGCT	ATTTTCTTA	GTAAATCTTG	ATACATGGTC		660
AATACCTCTA	CATTTCTAGC	AACTGTTCAA	AAAGGCAGTC	TTAAATGACT	CAATATTGAA		720
TTCTCAATTA	AATACAATCT	GATATAAAAT	GACGTAAATA	ACTATCAATA	CCAGTTCTAC		780
AGTAAGTTCA	AATTTAACAT	CACGACCTTC	AACGACATTT	TTGAAAATAG	CTACAACATA		840
GACAAATAGA	ATGACGCTTA	ACAAGCCCAT	AAACATCATT	CTAAAAAATT	TTTCTATTCC		900
CCTACTCTCC	CAACTCAGCA	CTATAGGAGA	TAATCTGGTC	AACTGTGTCA	GACAAGAATT		960
GGATGGTATC	ACGGAGTGGT	TTGTCTGTTG	AAATATCAGC	ACCGATAATC	ATGGCTGACT		1020
CAAGTGGTGT	CTTGCTACCA	CCTGATTTGA	GGAGATTGAG	CCAGTCTTCA	GCTCCAGTTT		1080
CAGAAATGTTT	TAGATGAAGG	TAACCAGCAG	TCGAGATAAC	TAGTCCTGCT	GAGTAAGTGT		1140
AACTATACAA	GCCCATATAG	TAGTGAGCTT	GGCGCATCCA	AGTCAGAGTT	GCATCATCGT		1200
CAATTTCAAT	AGCATCTCCC	CAGAAATCCG	TCAAAACTTC	CTTCATAATG	CTGTTGAGCT		1260
TGCTTGCTCC	AAAGGTCTCC	CCTTCTTCAA	TCAATGTATA	CACCTTACGC	TGGAAGGCGG		1320
CTTCCAAGAG	GTGGGTGATA	AAGTTATGGA	AGTAGGTGTC	TGTCAAGCGA	TGAGCCAGAG		1380
CGAAGCGTTT	TTGACGTGGG	TCATTAGACT	GGTTCTCCAA	GTAATCACTG	AGTAGCAATT		1440
CATTGAAGGT	TGACGGTGCT	TCAACATAGT	AGGTCGACAT	ATGGGCATTG	AAGTAACTTT		1500

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GATGATTGTC TGAAAAGATG AATTGACCAG AATGCCCGAT TTCATGAATC AAGGTATAGA	1560
CATCGCTCAA ACGGCCTGTC CAGCTCATGA GTACATAAGG GTGTACGCGA TATGGGTCCG	1620
CCGCATAACC ACCGGAATCC TTGCCACTGT TAGCAGCAAA GTCCACCCAG CGCTCTTCTT	1680
GGTAACGAGC AACTTCCTGA CAATATTCTT GCCCCAAAGG TTCTACCGAC TTCATGACCA	1740
AATCATAGGC ATCGTCAATA GTCACCTCAG GATTACAGGC GCTGTCCAAG TCCAATTTCC	1800
AGTCTGCAAA GGTCATCTTT TCAAGACCAT TTACCTTGGC AACATGCTTG AGGTATCTCT	1860
GAGCGACTGG TGCAAAGTCC TTCATGATGA GGTCAATCTG GCGGTCAAAC ATGACACGGT	1920
CCACTTCTTG TTCAGCTAGA AGATAGTCAA AGACAGAGTC GTATCCCTTC ATATCAGCCA	1980
AGAGTTTTTC AGACTTGACC TGAGCCAGAT AGGCTGCTGC AGCCGTATTT TGGTGCTTAC	2040
GAAGTCCCTC TGAGAAGGAA CGGAAGGATT TCTCACGAAC CTCAGCATCC TCATGGTTTT	2100
GGTAGAAAT CTCTAGGTC ACAAAGCTGT TTTGTAGGT CTTGCCATGG GCTTCAAAGT	2160
CAGCCATTTC AAAATCCCCA GCTCGCATCT TAGTATAAAT GTCCTGCGGA CTGTAGAAAA	2220
CTTCACCGAG ATTTGTCAAG GCCTTCTCCA CATCTGCCCC TAAGTAGTGG GCTTTTGTGA	2280
TTTTAGCCTG ACGAATGGCA GCTGTAAAT GTGGCAATTT ACCCAAACGG TCCAAGACTT	2340
CCTCATCTGC TGCCACCAAG GCATCGTCAA AGAAGGTCAA GGCTACGCTG GCATCTGTTT	2400
CAAATTCCAT CCCAGCTTGG GCAATATTGG CAAATTCGTC ATTGCTATAG TCCGTCGTCT	2460
GAGGCATAAA ACCATAGTTG CCAATATGGC TCATCTGAAT GTAGATCTGT TCCAATCCG	2520
CAAAGGCCCT CTCGAAATCC TCAAAAGTGT GAAGATTGCC CTTGTAATCA CGGCTAAACT	2580
GGTTGATGTC TTCGCGAGCT TTCTCGATTG CACGCAAGAA ATCCTCACGG TCTTGGTATA	2640
GGGCTGTTAA GTCCAGAGT TCCTTCTCTG GAAATTCTGA ACGGTGTTTT TGTTCATTT	2700
TCTTCTCTT ATTTCTCTAA TTCTACTAAA AACTAAGGG CTGATAAAGC GTAAAGCGGT	2760
GCTGTTTCTG CTCGCAAAAT ACGAGGACCT AGGCCTGCCA AAACGGCTCC TTTAGCTTCA	2820
AAACTTTCGA TTTCTGCAGG TGAGAGACCG CCTTCTGGAC CAAAGATAAA GAGCAGTTTG	2880
GCTCCTGTTT CAAGACCAGT GACTGCTTGC AGAAGCGCAG CGGCTTCTCC TTCTTTAGCT	2940
GATTCTTCAT AGGCTACTAT GATAGAGTCA AACTGGTCCA GCTGAGCTAG AAAATCTGCT	3000
TTTTTCTCGA AAAGTTTAAT ACTTGGTACA ATATTACGCT TGCTTTGCTC GGCTGCTCCA	3060
AGGGCAATTT TTTCTAGTTT TTCAACTTTT TTACCCAATT TCTTGCCATC CCACTTGGCA	3120
ACTGACCAGT CTGCAGGAAA GGCCAGATT TGGCTAGCCC CCAGTTCGGT TACTTTTGA	3180
GCGATGAACT CCAGCTTGTC TCCCTGGGA AATCCAGATG CGATGGTCAC TTGGACTGGT	3240

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AGTTCCACAT TGTCATTTAA TTCTTGGACC AACTCAAAC TACGATTTTC CATATCCAGC	3300
ACGCGCGCCA AGCGCTTGAT GCCATCATCA AAGACTAAGG TAACCTCATC CTCTTCTTTC	3360
AAGCGCATAA CCTGAAACAT ATGCTTACTG GTTTCCTTGT CCTCGATAGT GACAGGAGAG	3420
ATAGCACTGC CTTTACAAA ATACTGCTGC ATGCTAGCCT CCAATCACAC CAGAGATATC	3480
CTTGGTTTTC TTAAAGACAC AGGTATTCCA TTCCCCTTGA ACCATGTGAG TTTCGAGGAA	3540
AAATCCAGCT GACTCAGCCG ACTGGCGCAC CATGTCCAAC TTGTCCTTGA TAATGCCACT	3600
CATGATCAGG TAGCCTTCAT CTTTACCBA GCGATAAGCA TCGTCTATTA GATGAATGAG	3660
GATATCCGCC AAGATATTAG CCACAATCAC ATCTGCCTCA ATTTCCACAC CCTTAAGCAA	3720
ATCTCCAGCC GCTACATGGA TATTTTCCAT GCCAGGGTTG AGCTCAATAT TTTCTGAGC	3780
CACACGAACC GCCACATCAT CCAGGTCATA GGCGAAAATT TCTTTAGCCC CCAGAAGCGA	3840
GCTGGCAATA GAGAGAAGCC CTGAACCACT CCCACATCT AGCACCGTTT CGCCACCACG	3900
AAGAACCTGT TCCAAGGCAA AAAGGCTCAT CTTGGTAGTT GGGTGGGTTC CAGTACCAA	3960
AGCCATGCCA GGATCCAGCT TGATAATCAT TTCCCCGCA GTCGCCTCAT AGTCTGTCCA	4020
AGAGGGAACG ATGGTCAAAT CATGAGTGAT ACGAGCAGGT TCATAGTATT TCTTCCAGTT	4080
GTCTGCCAGG TCTTCTCAG CCAAGGCAGT CGTACCTATT TTTAACTCTC CCAAATCCAT	4140
AAAATCTGTC AATTCTGCTA GACGAGCCTG CAAATCCGCC TCAACCACTG TCACATCCAC	4200
CGTGTCAAGG TAGTAGGCTG TCACTACGAT TTCTTCTTGC TGCTCCACCT CTGGGAAAT	4260
CTCTCCAAAG CGGTCCACAT TTCCCACATA GTCCATACTG TCTTCGATTG CGACTCCTTG	4320
CGCTCCAGC TCAATCAAGA GATTGGAAAC CAACTCCTCT CCCTCACGCT TCACTGTAAC	4380
TTTTAACTCT TGCCATGTTT CCATTATTAA TACCAAGCCC GTAAAACACA AAACCAAAAT	4440
AGGAAATCT CTGAAGACGC TTGTGTCTAA GAGAAGTTA TCTTTTGGC ACAGTGTTTA	4500
GGGCGGGTTC AGTTTAGAAA TGTAAGTAA CCATCCTTTC TAATCACTTA CTTTAAATA	4560
ATCTTTAAT CTCTCTTGCA ACTGAGGCAC AACTTGACTG GAACAAAGAA ATTCCTCAAC	4620
ATTCATCAGC TGATAGCCCT GTCCTTCATC TCCGAAGATG ATATTGTCAA ATTGTTCTTG	4680
TCTTAGCTGA CCAACCATAA AGACCGATTT CTGCTTTTA AAAATTACGC TAGGATAAAT	4740
CTTGCTCCAA AGCAGACAGT CTTATCTAA ATGAATTCCC AGTTCCTCAT AAACCTCACG	4800
CCGAGCGCAT TCAAAAGGCG TTTCGTCCCC TTCACGGCCA CCACCTGGCA GTTCCCACAT	4860
ATTGGCCAG GGAATACTTG CCTTATCATC GCGTAAGATA GTCAAAAGCT TATCCCACA	4920
AAACAAAGCA ATCTTGCAAC CTGTGAAATC AGAAATTTCT AGTTCCATCT TCAGTTCTTT	4980
CTAACATTT CTTTCCAGC TCGGCTAACC AGTTTTCATA ATATCTTTTC TCATCCCTCA	5040

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ACATTCGACT	ACTATCCATT	TTCTGTCTAG	CAATCTTGAG	AGCCTTACGA	GTTCGATCTA	5100
CATCTTTCTT	CACCTTTAAT	TGATACCAGG	CTTGTATCAC	TTGAAGATTG	GACAGTTTGA	5160
GAGACAGAAA	CGATTTGACC	TGTCGAATAC	TAGCATATTG	CTCCGCTTGC	TCAAAATCTC	5220
CTTCCAACAA	GGCGATATGA	AGCAGGGATA	GTTGGGCAAC	TGTCTGCATC	ATCGGAGTAG	5280
TTGTCCCTCTC	AAGTAATGCT	TGAAACTGCT	GTTTAGCTAC	TTCTTCCTTC	CCTTCCAAAA	5340
TGGAAACTTC	ACCTTGCATA	CCTAATACAC	CATCCGCAAA	ACTCCCTCGT	GCATCCTCAG	5400
GAATGCTTG	AACAAAGTCT	TTCAAATCAT	ATTCTTGAGG	AGCTAGCAAG	GTCTGGGCAG	5460
AATGTCTCAA	TACCAGGTAG	GCGTATTGG	TATTTTCAGG	GTGTTGTAGT	AATTCCCAAA	5520
TTTTTGCTCC	ATCGGTGATG	TCGACTGGCA	AAATGTTATT	TAGGAAGAAA	GATAAATTAA	5580
GAAAAATCCA	AGTCCCTGCA	AAATACCAGC	TTCTTGTCAA	AAATCCAAAC	AATATCGCCA	5640
ATAATATCAA	GCCGAGATGA	ACCATCAAGC	CTCCTGAAAG	CATCAGGATG	ATTCTTTGAT	5700
CGCTTTCATC	CTCTTTTAAA	CCAATGTATT	GAGCACCAAC	ATTTTTCAGA	ATGGCTGTTC	5760
TACTAAGATG	AAACCTGCCT	GACTTTTTGG	TCAAAATAAA	ATGTCCTAAT	CCAAAAGCCA	5820
CCAGCCGATA	GCCTGTCAAG	TAGCCACAAA	AAGCATGACC	CAGCTCATGA	AGAATAAAGA	5880
TTAATACAT	GCTTAGAAGA	GCGAAGGCAT	AACCAAAAGT	AAAGGCTAAA	ACTGCGGAAT	5940
ACCCCAACTC	TGCAAATGCG	ATGTGTCCAC	AAGCAAAAGC	TAGCATAATA	AAGACAACAG	6000
CTAGCACATA	AACCAAAATA	GTCCCAATTT	TCTTCATAAC	ACCTCCAACC	AACTCCTAGT	6060
ATCTTGGATA	AGGATAAAAT	TCTCCCTTTT	CCAAGCCAAT	TTTTCCTTCT	TCAAAGACTT	6120
CTTGGTTCCT	TTCCATGACA	AATTCTCTTG	CTTCTGGGTC	TTCCAAAAAG	TCCATGAGGA	6180
CATCTAGCCC	AACCTCAGCA	GTATCTTTAA	GGAAAAGCGC	AAAATAAGCT	AAAAATTCAC	6240
GGGAAAATCC	TTTTTTAGGC	AGGTAAGGAA	TAACAGTCAA	ATAGTCTTCC	TCATTGACTG	6300
TTGACTTGGC	AGGATTGTAG	AAAAGGACCG	CTTCCTCAAA	AAGAATGTCA	TCTCATGAAA	6360
CCTCTCCGTC	TTCATCCACC	ATCTCCACAC	CGCAGCATTT	TGCGCTTCCA	ATAGAAAAC	6420
CACCTCTACC	GCATGGTTGC	GTTGTGTTCC	GCTAATCTCA	AAGTCAAAGG	GAAAGTTCTT	6480
GTCCAACCTC	TCCTCTAAAA	TATCTAAAAA	TCCGTATGTT	GCCATTTTGT	CCTCTTCTTA	6540
TGCGACTCTT	TAATCGCCCC	GATTGCTCGG	AAATATGCTA	AAATAGATAC	TACCATCTTA	6600
CCACAAAATT	ATTTTATGTC	CTAATTATAC	CATATTACCT	CATTTAAACC	CTTGGTATCA	6660
GTGATTTTCT	TAAAAGTCTG	ATTTCTTCAT	TTCTCATAAA	AATCAATATA	AAAAGCCCTC	6720
GAAAGGGCTA	ATAAATCTAT	AAAATCAATA	GGCGAGTAAC	TAGCACAAGT	GGACGTGCTT	6780

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TTTTATTGAC TATTACCACG ATACCACGCT TAATCTTAGG CTTGAACTTT CTTATCTGCA	6840
ATAGCGTCTG TCAAAGTCTG AGAAAAGTTA AGCCCCATTT CTCGTCCCAA CTTATCTGCC	6900
CATTTTGGTA TGGTCAAAGT CTTTTTAATG GGTTCCTGAC TTCCTAGGTA TTCTGATACA	6960
TCAACAGATA CCATAGAAAT AAAAGATTTA TCAAGGTCAT AGGTTGACAC GAAATCTTCA	7020
TCATCTTTAA AAGGATCATT ATCAATTAAA GACAAGCTAT TGATATCTGA TGGCTGAGCT	7080
AACTCTCCAT CACTCTCTAT CAAATCTGCA ACAGTTATCC CTAGCCACTC CGACCCCAT	7140
GCCAAAGCCT CAGAAATCCC CTCTCCTTGT GTAGCTGAGT ATTCAAAATC TGGGAAATGG	7200
ACAAAATAAG TCGCTTCTGT TCCGTCTGTG TCGTCATAAT AAAATAAAGC TGGATACGTA	7260
ACTAACATTT CACTACCTCC ATATCAAAAA GCAGGGACTG AATTTTACAA CCCAGCTTGC	7320
TTTCTTATCC CTCTTTCAGT GTACTTATTC AGCTCACCAT GAAGGATTGT GATAGGTCTT	7380
TCCCCTTGCT TTTCCATTTT AATATGGGAG CCTTTACCGC CTCTAGTCTT TATCCAACCA	7440
TGGGCCGTAA GGAGTTTAAC CATCTCTTTT TGTGTCATAG GCATAGCGCT TTTACCTCCT	7500
GACAACACCA TTATAACACG TGTTACACGT ATTGTAAAGG AGTGATACTT ATTATTCTAT	7560
TATACATAAA AGCCCCTAGA TGTGGTTCTA AGGGAAGCCA ATTTAATTCAT ACCTATTTTT	7620
CTAATGAGTA GTAAAACTG CTTCTTTATC GAGCAATTCA TCATCTGTAT AGTCAATTGT	7680
AAAAGTATCT CGATCTAAGA CAGATTGAGG CGGAGTTGAA TGAATCATAG GAACACTGCG	7740
TACTCTATAT TTTTATCTC CAATTTTAC AAACCTGATC TCTTCGAAAA TCAAATTCAA	7800
ACCACGTCAA CGTCGCCTTA CCGTACTCAA GTACAGcCTG CGGCTAGTTT CCTAGTTTGC	7860
TCTTTGATTT TCATTGAGTA TGATTAATC TCAAGTCTTC GAAATCAGGA TTTTCAACAG	7920
TTATTACAAG GAGGCGATTT ACTACTTCAA AAACATCAAT TATTCTATTT TTCATATTTT	7980
TTCAACCCAT TATTAGAATG AACTTCTTGG TAAGCAAAAT CAAGTTTAGA TTTAATGTTT	8040
TCGTACAAAT CTAAAATCTC TTTTGGAGTA TCTTCCCGGA AGAAAAGTTT TCTTTTCCCT	8100
GAAATAACTT GATCACTAAG AATCCAATGA CGAATTGTG TTGTAAAAAT CAAAATTTCC	8160
TGACTTGGTA GTTCCATCAT TTCCATTGCT TATCACCTCT CTTTTCATTA TAGTTCATAC	8220
AATGACATTC AGCAATATTA TTTCTCAACT CAGCACTTCC ACTTCTTTAG GCTCAACTAT	8280
CCTATTTTGA GCTTTAAGGA AAATCAAATC TCTCATGCTG ATACCTCTCC TCATTAAATT	8340
AAATAGTAAA AAAGATTCTA TCTCACTCCC TGATTATTAC AAAACCATG AAATATCACA	8400
ACTAATAGGC TAGAATGGAC ATAGTAAGAT ATAGTAGATG AGTCATTCTA CTCAAATCCA	8460
CGTTAGAAAG GACTGCTATG CCAGACAATC TCGCCGTTG CATGCGCCCG GG	8512

(2) INFORMATION FOR SEQ ID NO: 130:

895

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 2869 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 130:

CTCGTTTCAA GGTGAGTCT CTTGCAAATC TTGTTGCGGT TCTTCCTTTT GCCAAGGCAT	60
CTCTCCCATG GTTGGTGCCa GCCATTGTTG GAATCTTGCT CTCATTGGTT CTACCAAACA	120
AGCAAGAAAG CGATGTTTTT GAAATGGAAT AATCACTTAA ATCACTTTTG TAGCCAAGTC	180
TACAGGAGTG ATTkTCTTTT TTTATCCGAT GATAAATGTG TTATAATAGG TAGCGAAAGA	240
GGTGAAGAAA TGAATCAAAC AGTAGAATAT ATCAAAGAAC TGACAGCCAT TGCgtCGCCA	300
ACAGGCTTTA CTCGTGAGAT TGCGGACTAT TTAGTCAAGA CTCTAGAAGG TTTTGGTTAC	360
CAGCCGGTTC GCACATCCAA GGGCGGTGTC AATGTAAC TAAGAGTCA AAATGATGAG	420
CAACATCGCT ATGTGACTGC CCATGTAGAT ACGCTTGGTG CTATTGTCCG TGCTGTCAAA	480
CCAGACGGCC GTCTCAAAAT GGACCGTATC GGTGGCTTTC CTTGGAACAT GATTGAAGGA	540
GAAACTGTA CCATTCATGT GGCTAGCACA GGTGAAAAG TATCAGGAAC CATCCTCATC	600
CACCAAACIT CTTGCCATGT CTATAAGGAT GCAGGAAC TG CAGAACGCAC GCAAGACAAT	660
ATGGAAGTGC GTTTGGACGC CAAAGTAACT AGTGAAAAAG AAAC TCGTGC TCTTGGCATT	720
GAGGTGCGTG ATTTTATCAG TTTTGACCCA CGAACTGTCG TGACAGAGAC AGTTTATC	780
AAGTCTCGCC ATTTGGATGA CAAGGTCAGT GCGGCGATTT TGCTCAATCT CCTTCGCATT	840
TATAAGGAAG AGAAGATTGA ATTGCCGTA ACAACTCATT TTGCTTTTTC AGTCTTTGAA	900
GAAGTGGGAC ACGGTGCAAA CTCTAACATT CCTGCTCAGG TAGTAGAATA TCTGGCTGTG	960
GATATGGGAG CCATGGGAGA TGACCAGCAA ACAGACGAAT ATACAGTGTC TATCTGTGTC	1020
AAGGATGCTT CTGGACCTTA TCACTATGAC TTCCGTCAAC ATTTGGTGGC TTTGGCGAAA	1080
GAGCAAGATA TTCCATTTAA GCTGGATATC TATCCATTTT ATGGTTCGGA CGCTTCAGCG	1140
GCTATGTCTG CAGGGGCAGA AGTCAAACAC GCCCTTCTCG GTGCTGGTAT AGAGTCTAGC	1200
CATTCTATG AGCGTACCCA TATTGACTCG GTGATCGCAA CAGAACGAAT GGTCGATGCT	1260
TATCTTAAGA GCACGTTGCT GGACTAATAT GTGCCTTATT TGTCAGAGAA TTGACCTCAT	1320
CAAGAAGGAA GAAATCCTT ACTTTGTCAA AGAGTTGGAA ACAGGCTATC TTGTGGTTGG	1380
AGACCACCAG TATTTTGAAG GCTATAGTCT CTTCTAGCC AAGGAGCATG TCAGCGAATT	1440

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GCACCATTG AAAAAGGAGA CAAGACTCCG TTTTCTAGAA GAAATGAGTT TAGTCCAAGA	1500
GGCAGTTGCC AAGGCCTTTG CTGCTGAGAA AATGAATATC GAACTGCTAG CAAATGGCGA	1560
TGCTCATCTT CATTTGGCATC TGTTCACAG ACGGACAGGT GATATGAATG GTCATGGTCT	1620
CAAGGGTCGT GGACCAGTCT GGTGGGTTC CTTTGAAGAA ATGACAGCAG AAACCTGCCA	1680
AGCAAAACCG GATGAGATTA AAAGATTACT CAAACGTTTA TCGTCAGAAG TAGATAAACT	1740
ATTAGAAATA AAGGAGTAGA AATGAAGAAA AGATACCTAG TCTTGACAGC TTTGCTAGCC	1800
TTGAGTCTAG CAGCTTGTTT ACAAGAAAAA ACAAATAATG AAGATGGAGA AACTAAGACA	1860
GAACAGACAG CCAAAGCTGA TGGAACAGTC GGTAGTAAGT CTCAAGGAGC TGCCGAGAAG	1920
AAAGCAGAAG TGGTCAATAA AGGTGATTAC TACAGCATTC AAGGGAAATA CGATGAAATC	1980
ATCGTAGCCA ACAAACACTA TCCATTGTCT AAAGACTATA ATCCAGGGGA AAATCCAACA	2040
GCCAAGGCAG AGTTGGTCAA ACTCATCAA GCGATGCAAG AGGCAGSTTT CCCTATTAGT	2100
GATCATTACA GTGGTTTTAG AAGTTATGAA ACTCAGACCA AGCTCTATCA AGATTATGTC	2160
AACCAAGATG GAAAGGCAGC AGCTGACCGT TACTCTGCCC GTCCTGGCTA TAGCGAACAC	2220
CAGACAGGCT TGGCCTTTGA TGTGATTGGG ACTGATGGTG ATTTGGTGAC AGAAGAAAAA	2280
GCAGCCCAAT GGCTCTTGA TCATGCAGCT GATTATGGCT TTGTTGTCCG TTATCTCAA	2340
GGCAAGGAAA AGGAAACAGG CTATATGGCT GAAGAATGGC ACCTGCGTTA TGTAGGAAAA	2400
GAAGCTAAAG AAATTGCTGC AAGTGGTCTC AGTTTGAAG AATACTATGG CTTTGAAGGC	2460
GGGACTACG TCGATTAATA CTCTTCGAAA ATCTCTTCAA ACCACGTCAG CGTCGCCTTA	2520
CCTACTGACT GCGTCGGTTC TATTCACAAC CTCAAAACAG TGTTTGTAGT CGATTCTGTC	2580
GTTTTATCTG CAACCTCAA GCTGTACTTT GAGCAGTGGC GCTAGCTTCC TAGTTTGCTC	2640
TTTGATTTTC ATTGAGTACA AAAAGTAAAC TTTTCTCTTG CAATTCCAGA TAAATAGTGT	2700
ATAATGGATG GGTATGTGAA AACATACTT GTGGGAGGTA AAAATCTCTA ATTACCGCCA	2760
AAACCACAAA GGAGGATTTA AAAATGGCTA AAAAAGTCGA AAAACTTGTA AAATTGCAAA	2820
TCCCTGCTGG TAAAGCTACA CCAGCTCCAC CGGTTGGACC TGCTCTTGG	2869

(2) INFORMATION FOR SEQ ID NO: 131:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 6186 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 131:

897

CTGAATCCCT TATAGGAGTC CAGTAACTTT TTAGCCTCTA CTTTGCCTTC ATAGGCAGCT	60
TCAACATCAT TAAAAAAGA ArGCAC TGAA GCAAGTTCTT CAGTGCTCCA CGACAAATCT	120
AGTGGGTAACTATACTGTTT GTTCATTAACTAATACCAGC TCTCATCTCT GCTTCTTTTA	180
GTTCTTGCTT ACGATAACTA CGAGGGAGAA AAGCACGAAT CTCATCTTCA TTTAAACCGA	240
TTTGCATACG CTTGGCATCA ATAATAATTG GACGACGCAA AAGACTAGGA TACTGCTCAA	300
TCAATGAAG CAATCCGAT ACCGAAATAC TCTCTACATC AATATTCAAT TTTTGAAAAA	360
TTTTTGAACG AGTTGAAATG ATGTCAATCAG TACCATTTTC GGTCAAGGAA AGGATGTCTT	420
GCAATCTTTT TCTTGTTAAA GGAAGTGTCA TAATATTGTG TTCCACAAAG GGAAGTTATG	480
TTTTTCTAAC CAGGCCTTAG CCTTACGACA TGATGTACAG CTCGGTGATA GAAATAGTGT	540
AATCATGCTT TTCTCTCTCT ATCTATACTT TGCTACTTCT ATTATACAAA AAAATAAAGC	600
GCTTGACTAG GGATTTT TAG AAAAAAGCC TATTTTTTCA AGAAAAATAG GCTTTTTCG	660
AACGATTGAC ACAATTGGAT TTGGTTAATT CACTCTTAAC GATGGTTTAA ACGATATAT	720
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AGATAGCCAA AGAAGTTTTC ATAGAGGGCA AAAAAGAGGA GGAAGGCATG AAGAAAGAAG	840
GTCTCTGGCA AAATCATAAT AACAGGATCC TTGGCTGGAT CAAAAAGCCA GGTATCATCT	900
CCCACAAAGA GAATTGATG GAAAAGAGTA AAGAATTGGT CAAAACCAAT CAAAAGTCCC	960
CCAAGTCCAA TCATCACAGG TAAGACTACT AGAGCCAGGA GACTTTTTCG ATAAAGAGAC	1020
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GCTACTAGCT GAACCAAATG AAAGAGATTC TTGACCACTG CGAAATGGTG CAGACCAGCT	1140
GCTGACGAAC GAAAATCAGG CATCTGTAAG ACCTGACTAA AAGGATTGGT CAGATAATTC	1200
ATCAAGATAT GAAAATTGTA TTGAATGGTT TCTGGTTTAA GATAGACTCG ATTCGTTAAG	1260
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GAGAGGGAGA GGAGAAAGAG CATAGAGCCC CAAAAGATCA ATTTAGTTTT CATCAAAATC	1380
CCACTCCGCA AGGCTAGAAA CCACATGTGT CGGTGCGATT GGCAGGCCAG CTACTTCTTC	1440
TGCCTTAGTA AAACCTGTCTG TCACCAAGAG CGTTGGAATG CCATTGTCAA TCCCAGCCCC	1500
AATATCAGTC AAATAATTGT CCCCACCAT GATTAATCTT TCACGTTCCA AACCTAAGTG	1560
CTCAACCGCC TTGTCCATAA TGATGGCATT TGGTTTTCCG ATATAAACCG GCTTCACTCG	1620
TGTCGCTACT TCAAGCAGCG TAATCAGTGA GCCAGCACCT GGCAAAAGAC CGCGTTCCGT	1680
CGGGATGTTG AGGTCAGGAT TGGTTCCGAT AAAATGGGCA CCCTTTTGAA TAGCAAGAGT	1740